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Issued April 5, 1907.

U. S. DEPARTMENT OF AGRICULTURE.

OFFICE OF EXPERIMENT STATIONS—BULLETIN 182.

A. C. TRUE, Director.

PROCEEDINGS

OF THE

ELEVENTH ANNUAL MEETING

OF THE

AMERICAN ASSOCIATION OF FARMERS' INSTITUTE WORKERS,

HELD AT

BATON ROUGE, LA., NOVEMBER 12-14, 1906.

EDITED BY

W. H. BEAL,

For the Office of Experiment Stations,

AND

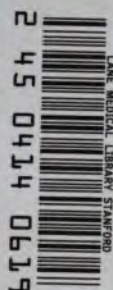
JOHN HAMILTON,

For the Association.

WASHINGTON:

GOVERNMENT PRINTING OFFICE.

1907.



OFFICIALS IN CHARGE OF FARMERS' INSTITUTES.

- ALABAMA.—C. A. Cary, professor of veterinary science, Polytechnic Institute, Auburn;
G. W. Carver, director agricultural experiment station, Tuskegee Institute.
- ALASKA.—C. C. Georgeson, agricultural experiment station, Sitka.
- ARIZONA.—R. H. Forbes, director agricultural experiment station, Tucson.
- ARKANSAS.—W. G. Vincenbeller, director agricultural experiment station, Fayetteville.
- CALIFORNIA.—E. W. Wickson, superintendent of farmers' institutes, University of California, Berkeley; D. T. Fowler, conductor of farmers' institutes in central and northern California, Berkeley; J. B. Nott, conductor of farmers' institutes in southern California, Anaheim; W. T. Clark, assistant superintendent of farmers' institutes, Berkeley.
- COLORADO.—W. L. Carlyle, dean of school of agriculture, State Agricultural College, Fort Collins; Fred P. Johnson, superintendent of farmers' institutes, Denver.
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- HAWAII.—J. G. Smith, agricultural experiment station, Honolulu.
- IDaho.—H. T. French, director agricultural experiment station, Moscow.
- ILLINOIS.—Frank H. Hall, secretary Illinois farmers' institutes, Aurora.
- INDIANA.—W. C. Latta, professor of agriculture in Purdue University, Lafayette.
- IOWA.—J. C. Simpson, secretary State board of agriculture, Des Moines.
- KANSAS.—J. H. Miller, superintendent farmers' institutes, Manhattan.
- KENTUCKY.—Hubert Vreeland, commissioner of agriculture, Frankfort.
- LOUISIANA.—Charles Schuler, commissioner of agriculture and immigration, Baton Rouge.
- MAINE.—A. W. Gilman, commissioner of agriculture, Augusta.
- MARYLAND.—W. L. Amoss, director farmers' institutes, Benson.
- MASSACHUSETTS.—J. L. Ellsworth, secretary State board of agriculture, Boston.
- MICHIGAN.—L. R. Taft, superintendent of farmers' institutes, agricultural college.
- MINNESOTA.—D. C. Gregg, director farmers' institutes, Lynd.
- MISSISSIPPI.—E. R. Lloyd, director farmers' institutes, agricultural college.
- MISSOURI.—George B. Ellis, secretary State board of agriculture, Columbia.
- MONTANA.—F. B. Lindfeld, director agricultural experiment station, Bozeman.
- NEBRASKA.—E. A. Burnett, director agricultural experiment station, Lincoln; Val Keyser, assistant superintendent farmers' institutes, Fairbury, R. F. D. 3.
- NEVADA.—J. E. Stubbs, president Nevada State University, Reno.
- NEW HAMPSHIRE.—N. J. Bachelder, secretary State board of agriculture, Concord.
- NEW JERSEY.—Franklin Dye, secretary State board of agriculture, Trenton.
- NEW MEXICO.—John D. Tusley, superintendent farmers' institutes, agricultural college.
- NEW YORK.—F. E. Dawley, director farmers' institutes, Fayetteville.
- NORTH CAROLINA.—S. L. Patterson, commissioner of agriculture, Raleigh; Tait Butler, professor veterinary science, College of Agriculture and Mechanic Arts, field agent, Raleigh.
- NORTH DAKOTA.—E. E. Kaufman, superintendent of farmers' institutes, Fargo.
- OHIO.—T. L. Calvert, secretary State board of agriculture, Columbus.
- OKLAHOMA.—C. A. McNabb, secretary State board of agriculture, Guthrie.
- OREGON.—J. Withycombe, director agricultural experiment station, Corvallis.
- PENNSYLVANIA.—A. L. Martin, deputy secretary of agriculture, Harrisburg.
- PORTO RICO.—D. W. May, agricultural experiment station, Mayaguez.
- RHODE ISLAND.—John J. Dunn, secretary State board of agriculture, Providence.
- SOUTH CAROLINA.—J. N. Harper, director agricultural experiment station, Clemson College.
- SOUTH DAKOTA.—A. E. Chamberlain, superintendent of farmers' institutes, Howard.
- TENNESSEE.—W. W. Ogilvie, commissioner of agriculture, Nashville.
- TEXAS.—J. W. Carson, director farmers' institutes, College Station.
- UTAH.—P. A. Yoder, director agricultural experiment station, Logan.
- VERMONT.—Geo. Atken, secretary State board of agriculture, Woodstock.
- VIRGINIA.—G. W. Kolner, commissioner of agriculture, Richmond; A. M. Soule, director agricultural experiment station and secretary Virginia State farmers' institute, Blacksburg.
- WASHINGTON.—E. A. Bryan, president Agricultural College and School of Science, Pullman; E. E. Elliott, professor of agriculture, Washington Agricultural College, field agent in charge of institutes, Pullman.
- WEST VIRGINIA.—H. E. Williams, superintendent of farmers' institutes, Charleston.
- WISCONSIN.—G. B. McKerraw, director farmers' institutes, Madison.
- WYOMING.—R. C. Buffum, director agricultural experiment station, Laramie.

DIRECTORS OF FARMERS' INSTITUTES OF CANADA.

- ALBERTA.—H. A. Craig, superintendent of farmers' institutes, Edmonton.
- BRITISH COLUMBIA.—J. R. Anderson, deputy minister of agriculture, Victoria.
- MANITOBA.—J. W. Black, deputy minister of agriculture, Winnipeg.
- NEW BRUNSWICK.—Thos. A. Peters, deputy minister of agriculture, Fredericton.
- NOVA SCOTIA.—B. W. Chipman, secretary of agriculture, Halifax.
- ONTARIO.—G. A. Putnam, director of farmers' institutes, Toronto.
- PRINCE EDWARD ISLAND.—Theo. Ross, secretary of agriculture, Charlottetown.
- QUEBEC.—G. A. Girault, deputy minister of agriculture, Quebec.
- SASKATCHEWAN.—James Murray, superintendent fairs and institutes, Regina.

U. S. DEPARTMENT OF AGRICULTURE.

OFFICE OF EXPERIMENT STATIONS—BULLETIN 182.

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EDITED BY

W. H. BEAL,
For the Office of Experiment Stations,
AND
JOHN HAMILTON,
For the Association.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1907.

THE OFFICE OF EXPERIMENT STATIONS.

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JOHN HAMILTON, B. S., M. S. A., *Farmers' Institute Specialist.*

LETTER OF TRANSMITTAL

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF EXPERIMENT STATIONS,
Washington, D. C., December 21, 1906.

SIR: I have the honor to transmit herewith, and to recommend for publication as Bulletin 182 of this Office, a report of the proceedings of the eleventh annual meeting of the American Association of Farmers' Institute Workers, held at Baton Rouge, La., November 12-14, 1906.

Respectfully,

A. C. TRUE,
Director.

HON. JAMES WILSON,
Secretary of Agriculture.

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OFFICERS AND COMMITTEES OF THE ASSOCIATION.

President.

E. A. BURNETT, Lincoln, Nebr.

Vice-President.

C. A. CARY, Auburn, Ala.

Secretary-Treasurer.

JOHN HAMILTON, Washington, D. C.

Executive Committee.

The PRESIDENT and the SECRETARY-TREASURER, ex officio; F. H. HALL, Aurora, Ill.; FRANKLIN DYE, Trenton, N. J.; G. A. PUTNAM, Toronto, Ontario.

STANDING COMMITTEES.

Institute Organization and Methods.

F. H. RANKIN, Urbana, Ill., chairman; A. M. SOULE, Blacksburg, Va.; JAMES MURRAY, Regina, Canada.

Institute Lecturers.

W. C. LATTA, Lafayette, Ind., chairman; GEORGE MCKERROW, Madison, Wis.; W. L. CALVERT, Columbus, Ohio.

Cooperation with Other Educational Agencies.

KENYON L. BUTTERFIELD, Amherst, Mass., chairman; HUBERT VREELAND, Lexington, Ky.; TAIT BUTLER, Raleigh, N. C.

Movable Schools of Agriculture.

G. C. CREELMAN, Guelph, Canada, chairman; A. L. MARTIN, Harrisburg, Pa.; F. E. DAWLEY, Fayetteville, N. Y.

Boys' and Girls' Institutes.

L. R. TAFT, Agricultural College, Mich., chairman; H. T. FRENCH, Moscow, Idaho; J. W. CARSON, College Station, Tex.

Women's Institutes.

MISS BLANCHE R. MADDOCK, Guelph, Ontario, chairman; Mrs. I. S. RAYMOND, Sidney, Ill.; Mrs. HELEN WELLS, Syracuse, N. Y.

Special Committee on Legislation.

Hon. N. B. CRITCHFIELD, Harrisburg, Pa., chairman; Prof. L. R. TAFT, Agricultural College, Mich.; Fred H. RANKIN, Urbana, Ill.

DELEGATES AND VISITORS IN ATTENDANCE.

AMOSS, WM. L., Benson, Md.	McCLENDON, S. E., Baton Rouge, La.
ASWELL, J. B., Baton Rouge, La.	McKAY, ALEX. B., Agricultural College, Miss.
BAILEY, L. H., Ithaca, N. Y.	McKERROW, GEO., Madison, Wis.
BARNES, HOUSTON, Calhoun, La.	MACKINTOSH, R. S., Auburn, Ala.
BARROW, W. M., Baton Rouge, La.	MANCHESTER, H. G., Winsted, Conn.
REAL, W. J., Agricultural College, Mich.	MILKS, H. J., Baton Rouge, La.
BEVIER, ISABEL, Urbana, Ill.	MORGAN, H. A., Knoxville, Tenn.
BRECKENRIDGE, G. T., Paragould, Ark.	MUMFORD, H. W., Urbana, Ill.
BUCKNER, A. W., Baton Rouge, La.	MURRAY, JAMES, Regina, Canada.
BUFFUM, B. C., Laramie, Wyo.	MYERS, W. S., New Brunswick, N. J.
BURNETT, E. A., Lincoln, Nebr.	NELSON, AVEN, Laramie, Wyo.
BURNETTE, F. H., Baton Rouge.	NEWELL, WILMON, Baton Rouge, La.
BUTLER, TAIT, Raleigh, N. C.	NEWMAN, C. L., Clemson College, S. C.
BUTTERFIELD, K. L., Amherst, Mass.	NEWMAN, MRS. C. L., Clemson College, S. C.
CALVERT, T. L., Columbus, Ohio.	PATE, CHAS. J., Baton Rouge, La.
CARY, C. A., Auburn, Ala.	PIPES, S. W., Calhoun, La.
CHAMBERLIN, W. B., Chamberlin, La.	PUTNAM, GEO. A., Toronto, Ontario.
CHURCHILL, G. W., Geneva, N. Y.	RANE, F. W., Boston, Mass.
CLINTON, L. A., Storrs, Conn.	RANKIN, FRED H., Urbana, Ill.
CONNER, CHAS. M., Raleigh, N. C.	RANKIN, MRS. FRED H., Urbana, Ill.
CRAIG, H. A., Edmonton, Canada.	RAWL, B. H., Washington, D. C.
CREELMAN, G. C., Guelph, Ontario.	RAYMOND, MRS. I. S., Sidney, Ill.
CRITCHFIELD, N. B., Harrisburg, Pa.	RIVERS, V. V., Monterey, Mexico.
CROSBY, D. J., Washington, D. C.	ROLFS, P. H., Gainesville, Fla.
CURTISS, CHAS. F., Ames, Iowa.	RUDDICK, J. A., Ottawa, Canada.
DALRYMPLE, W. H., Baton Rouge, La.	SANDLES, A. P., Ottawa, Ohio.
DODSON, W. R., Baton Rouge, La.	SANDSTEN, E. P., Madison, Wis.
DUNCAN, D. I., New York, N. Y.	SCHERMERHORN, A. V., Kinnundy, Ill.
EDWARDS, HOWARD, Kingston, R. I.	SCHERMERHORN, MRS. A. V., Kinnundy, Ill.
ELLSWORTH, J. LEWIS, Boston, Mass.	SCHULER, CHAS., Baton Rouge, La.
ENGLISH, W. L., Stillwater, Okla.	SCOVELL, M. A., Lexington, Ky.
EVANS, PAUL, Mountain Grove, Mo.	SHEPPERD, J. H., Fargo, N. Dak.
FAYROT, J. ST. CLAIR, New Orleans, La.	SKINNER, J. H., Lafayette, Ind.
FRENCH, H. T., Moscow, Idaho.	SLAGLE, ROBT. L., Brookings, S. Dak.
FULTON, H. R., Baton Rouge, La.	SMITH, R. I., Atlanta, Ga.
GREEN, H. L., Baton Rouge, La.	SOULE, ANDREW M., Blacksburg, Va.
GREEN, SAMUEL B., St. Anthony Park, Minn.	SUMMERS, J. C., Baton Rouge, La.
HALL, F. H., Aurora, Ill.	TAFT, L. R., Agricultural College, Mich.
HALL, MRS. F. H., Aurora, Ill.	THORNE, C. E., Wooster, Ohio.
HALLIGAN, J. E., Baton Rouge, La.	THORNE, MRS. C. E., Wooster, Ohio.
HAMILTON, JOHN, Washington, D. C.	TRUE, A. C., Washington, D. C.
HARGRAVE, ROBT. O., Baton Rouge, La.	VINCENHELLER, W. G., Fayetteville, Ark.
HARPER, J. N., Clemson College, S. C.	VOITIER, F. H., New Orleans, La.
HAYWARD, H., Newark, Del.	VOORHEES, EDW. B., New Brunswick, N. J.
HILLS, J. L., Burlington, Vt.	VREELAND, HUBERT, Frankfort, Ky.
HUNNICUTT, G. F., Atlanta, Ga.	WATERS, H. J., Columbia, Mo.
HURD, WILLIAM D., Orono, Me.	WHITE, F. S., St. Louis, Mo.
HUSTON, H. A., Chicago, Ill.	WHITE, H. C., Athens, Ga.
JORDAN, E. L., Baton Rouge, La.	WILLOUGHBY, C. L., Experiment, Ga.
JORDAN, W. H., Geneva, N. Y.	WOGLUM, R. S., Raleigh, N. C.
KAUFMAN, E. E., Fargo, N. Dak.	WOODS, CHAS. D., Orono, Me.
KENNEDY, W. J., Ames, Iowa.	WORST, J. H., Agricultural College, N. Dak.
LATTA, PAULINE, Lafayette, Ind.	WORST, MRS. J. H., Agricultural College, N. Dak.
LATTA, W. C., Lafayette, Ind.	YODER, P. A., Logan, Utah.
LAYLIN, T. C., Norwalk, Ohio.	
LAYLIN, MRS. T. C., Norwalk, Ohio.	
LINFIELD, F. B., Bozeman, Mont.	
LLOYD, E. R., Agricultural College, Miss.	

CONSTITUTION OF THE ASSOCIATION.

ARTICLE I.

NAME.

This organization shall be known by the name of The American Association of Farmers' Institute Workers.

ARTICLE II.

OFFICERS.

The officers shall consist of a president, vice-president, and secretary-treasurer, to be elected by ballot.

ARTICLE III.

MEMBERSHIP.

Any active worker in the farmers' institutes in the United States and Canada may become a regular member of this association on payment of the annual dues, and is entitled to one vote. A delegate member representing the State Farmers' Institute organization shall be admitted from each State and Province, on compliance with the by-laws, and shall be entitled to cast five votes on any question: *Provided*, That the annual membership dues of the person shall be \$1 and that of the State \$5. Also the United States Department of Agriculture and the Office of Experiment Stations of that Department shall each be entitled to representation in the association, with the full privileges of delegate membership.

ARTICLE IV.

DUES.

The annual dues of delegate members shall be \$5 for six representatives of each State. The annual dues of members not delegates shall be \$1.

ARTICLE V.

TERM OF OFFICE.

The term of office of the officers of this association shall be for one year from the 1st day of January next following their election, or until their successors are elected.

ARTICLE VI.

DUTIES OF OFFICERS.

The duties of the officers of this association shall be those usually performed by officials of like rank in similar associations.

ARTICLE VII.

ASSOCIATE MEMBERS.

Honorary members of this organization may be elected from time to time upon the presentation of their names by some member of the association and upon their receiving the votes of at least two-thirds of the members present.

ARTICLE VIII.

POWER OF HONORARY MEMBERS.

Honorary members shall be entitled to sit in all of the sessions of the association and to take part in all discussions, but shall have no vote.

ARTICLE IX.

BY-LAWS.

This association shall have power to make by-laws from time to time not inconsistent with this constitution.

ARTICLE X.

EXECUTIVE COMMITTEE.

There shall be an executive committee, consisting of the president and the secretary-treasurer of this association, ex officio, and three other members, to be elected annually by ballot, who shall meet at the call of the president and have charge of such matters of business relating to the association as shall be necessary to attend to in the interval between the annual meetings, and it shall be their duty to report such action as they may take to the next regular meeting of the association.

ARTICLE XI.

CHANGE IN CONSTITUTION.

This constitution shall not be changed except by a vote of two-thirds of the members at a regular annual meeting held one year from the date on which the proposed alteration or amendment has been first presented.

BY-LAWS.

- (1) The time of meeting of this organization shall be fixed by the executive committee.
- (2) Order of business:
 1. Calling the roll of membership.
 2. Reading of minutes of previous meeting.
 3. Admission of new members.
 4. Reports of committees.
 5. Election of officers.
 6. Appointment of committees
 7. Unfinished business.
 8. New business.
 9. *Adjournment.*

PROCEEDINGS OF THE ELEVENTH ANNUAL MEETING OF THE AMERICAN ASSOCIATION OF FARMERS' INSTITUTE WORKERS.

MORNING SESSION, MONDAY, NOVEMBER 12, 1906.

The association was called to order at 10 o'clock a. m. in the banquet hall of the Hotel Grouchy, the president of the association, G. C. Creelman, of Ontario, in the chair.

The commissioner of agriculture and immigration of the State of Louisiana, Hon. Charles Schuler, was introduced and delivered an address of welcome, to which H. A. Morgan, of Tennessee, responded on behalf of the association.

The annual address was then presented by G. C. Creelman, president of the association, as follows:

PRESIDENT'S ADDRESS.

The necessity for an organization of institute workers was first suggested by Mr. R. E. A. Leach, of Manitoba, Canada. This met with a cordial response from the heads of the institute work in the United States and Canada.

The organization meeting was called at Watertown, Wis., on March 18, 1896. There were present representatives from Wisconsin, Minnesota, Nebraska, Michigan, Illinois, and Ohio. The name then chosen for the organization was The International Association of Farmers' Institute Workers, which was afterwards changed to The American Association of Farmers' Institute Managers.

The next meeting was held at the Sherman House, Chicago, on October 14 and 15, 1896, with 29 persons in attendance. At that meeting papers were read and questions relating to institute work were discussed. A report of the Watertown and Chicago meetings was published in one volume by the secretary, Mr. F. W. Taylor, of Lincoln, Nebr., and distributed among the members.

The third meeting, which was really the second annual meeting, was held at Columbus, Ohio, on October 27 and 28, 1897. At this meeting the secretary reported that 7 superintendents were present and about 50 representatives from various States and organizations. A report of this meeting was published early the following year and contained a short report from the different States and Provinces of the United States and Canada, besides many practical papers and spirited discussions on farmers' institute work.

The third annual meeting was held at Omaha on October 4 and 5, 1898. There was a small attendance at this meeting, and no report has been published.

In 1899 the meeting was held in Rochester, N. Y., on March 29 and 30. This meeting was well attended, the director of institutes in New York having a large number of institute workers assembled in Rochester at that time. At this meeting the name of the association was changed to The American Association of Farmers' Institute Workers. This was done to broaden its sphere of usefulness and to allow the men who are actually engaged in institute field work to take a more active interest in the work of the association. The proceedings of this meeting were published in the transactions of the New York State Agricultural Society and Bureau of Farmers' Institutes for 1898.

In 1900, on March 15 and 16, the meeting was held in Delavan, Wis., at the close of the State "round-up. The proceedings of this meeting were published

in the Wisconsin Farmers' Institute Bulletin, No. 14, for the year 1900. Only three institute directors were present at the meeting.

In 1901, the year of the Pan-American Exposition, the meeting was held in Buffalo and the association seemed to take on new life. The Southern States were represented for the first time, Mississippi sending 1 representative. Canada sent 15 delegates. The papers were well prepared and ably discussed. The proceedings of this meeting were published by the United States Government. Since then the Department of Agriculture has undertaken the work each year.

In 1902 the association met for the first time in Washington, and the Federal authorities took an active and personal interest in the meeting. Alabama, California, Kentucky, Louisiana, North Carolina, South Carolina, and West Virginia were for the first time represented.

In 1903 the meeting was held in Toronto, Canada. A larger territory than ever was represented at the meeting. Arkansas, Connecticut, New Brunswick, North Dakota, Quebec, and the Canadian Northwest Territories sent delegates.

In 1904 we met during the World's Fair at St. Louis. This was a most successful convention, and again we find several States represented for the first time, including Idaho, Massachusetts, Missouri, Oklahoma, and Tennessee.

In 1905 the meeting was to have gone to Louisiana, but on account of a yellow fever epidemic in that State the executive committee decided to go to Washington and to hold the meeting during the same week as the convention of agricultural colleges and experiment stations. Reports were received for the first time from Georgia, Montana, Nevada, Nova Scotia, Prince Edward Island, Utah, Vermont, and Virginia.

This brings us up to the present meeting, which I trust will surpass all others held previous to this time.

WHAT HAS BEEN ACCOMPLISHED BY THE SEVERAL STATES AND PROVINCES.

Thus, from a few widely separated institute systems, if they could be so called, the work has grown until almost every State and province is doing some kind of institute work. As a rule it starts with the agricultural college or experiment station, and when it has grown to be an institution by itself, it is taken over by the State or provincial department of agriculture and managed as a separate division or bureau. Where they have been fairly tried, there is no longer any discussion as to their value to the farming community; but there are institutes and institutes, and as your secretary for nearly eight years I have been privileged to watch the progress of events in both the United States and Canada, and I beg leave to call your attention to some of the things that I have witnessed.

Farmers' institutes not a money-making proposition.—I believe this to be true, and yet, consciously or unconsciously, most institute campaigns are waged with the war cry, How to make money on the farm. In one section of the country I know of one institute speaker who announced the subject of the address to be, "The hog as a money-maker," and in the very same delegation was another man with the topic, "The money-maker as a hog;" and much might be said on both sides. The truth I wish to impress, however, is this, that there is a tendency on the part of farmers in most sections of the country to favor discussions on the last or commercial end of farming. "The hen as a money-maker," "The cow that gives you \$50 a year the only cow to keep," "Horse breeding for profit," and so on and so forth. A speaker who can talk well on such subjects is universally well received and listened to with marked attention, and if he can offer a plausible plan for reducing the cost of production or increasing the market price he is always welcome. Such talks may be necessary as a matter of policy, to entice to the meetings certain persons who will not leave the farm work at any time unless they feel that they are getting money value for their time, or another class that is constantly looking for a get-rich-quick scheme; but aside from policy's sake, such talks should not be allowed to occupy but a very small part of the programme.

Educational, not commercial.—I make these statements because I believe that farmers' institute work should be educational, not commercial. It should tend to develop among rural people a high intellectual and moral standard, and no effort is so inefficient in this direction as that which embraces the small details of farm practice, or with the buying and selling end of the business. How much valuable time have you seen wasted at meetings by discussions on, "Which is the best breed of dairy cattle?" "Should cows be

watered once or twice a day in winter?" "Which exhausts the soil most, a crop of wheat or a crop of corn?"

Agriculture can only develop and progress as the men engaged in the business develop and progress; and so long as only 1 per cent of the eligible farmers' sons of America come in personal touch with our agricultural college and experiment station work, it is the duty of the farmers' institute to aid in developing intellectual power; to teach farmers on their farms to place facts in their right relation; to learn the why and the wherefore of the things they are doing; to reason from cause to effect.

You agree with me that after all is said and done the man is the important factor in the whole scheme of creation; and so, as no two men work or think just alike, no two men build a barn just alike, and copying verbatim another man's tables of rations may be poor economy; therefore it is surely wiser to teach the principles of ventilation and construction than to advocate and distribute to an audience the detailed plan of some particular barn that suits your conditions. Better to teach the value of the constituent parts of a ration for feeding cattle than to offer a formula for mixing certain foods which you have found profitable in your own stable. Each man's farmstead presents its own problems and difficulties, and these he must work out for himself. I admit that we can interest and entertain farmers' audiences in personal experiences and commercial discussions, but we can not instruct, nor can we stimulate, intellectual development. We sometimes forget that "Money making on the farm, or elsewhere, is generally due to business genius, or to conditions that make it easily possible."

I remember once hearing Josh Billings say that to a man who came to him to ask, "How to make money in farming," he replied, "Rise early, work hard and late, live on what you can't sell, give nothing away, and if you don't get rich and go to the devil, you may sue me for damages." The man of brains who does not live for money making should remain on the farm, and the institute should be a factor in keeping him there, happy and contented.

The institute worker.—In the early days of institute work, my idea of a first-class institute worker was one who had made a signal success in some branch of agricultural work and could stand on his feet and tell how he did it. And this kind of man was always welcome at the meetings. Such a man nearly always told his story from beginning to end and provoked very little discussion. The meeting was pronounced a success by those who attended it, and for some years I believed I was following the right lines. Then I began to see my mistake, for I found that when some thoughtful man in the audience asked for the reasons why certain causes produced certain effects, the speaker could not tell. He did not know. By certain inherited shrewdness and by virtue of hard work he had mastered many of the difficulties that presented themselves on his own farm, but he knew nothing of the principles underlying these results, and when others tried his method they failed, because of the differences in their conditions and environments.

Under these circumstances one of two things must be done with this kind of a worker. He must either be dropped from the list, or be properly instructed himself in the A B C of scientific agriculture. I believe that the latter scheme will work in many cases. The man already knows two things well:

- (1) He can farm one farm as it should be farmed.
- (2) He can tell how he does it.

In addition, he has learned a great many things from the experience of others, as he has traveled all over the State or Province. If, then, he can be taught the simple principles underlying the processes he is endeavoring to teach, he will become, indeed, a most valuable instructor. I know of one institute director, at least, who is taking every one of his workers this year to an agricultural college, there to remain until each in his special line is drilled in the "reason why" of things.

Permanent organization.—I have also changed my views somewhat in regard to permanent organization for farmers' institute work. In the beginning of any successful educational campaign it is necessary to create first a public sentiment in favor of the new movement. One means used to this end is the holding of public meetings, and for the success of the first gatherings, at least, it is essential that the speakers shall be men of no small oratorical ability. Real orators attract the crowd and strong addresses well delivered have always been potent factors in framing public opinion.

Most farmers' institutes started in this way, and some have gotten very little further. No permanent county organization has been effected, and yet the demands for meetings have been greater and greater each year, and to these meetings are sent men who have never been in the neighborhood before and probably never will be again. They make their talk and arouse some enthusiasm and go away and the place settles back to its old ways of thinking and its old way of doing.

Surely every State in the Union and every Province in the Dominion has grown beyond this organizing state in institute work. Surely in both countries the facts are well known and generally recognized that the tilling of the soil is and must be the principal industry. And yet that industry is more badly managed than any other business in the country. The difference between the average crop and the crop obtained by our best farmers is too great. Forty bushels of wheat per acre were harvested this year by some men in every wheat-growing State of the Union, and yet the average wheat crop of the United States for the past ten years was, according to the report of the Secretary of Agriculture, only 13.4 bushels. During the same year the average in Germany was 27.2 bushels, and in Great Britain, 31.6. And yet we are not going to acknowledge that European countries are better adapted for wheat growing than are the countries in North America. I am thoroughly convinced that the crying need is for stronger organization among the farmers themselves, calling for regular meetings every month or oftener, in each locality, conducted and managed entirely by local help, with an occasional outsider who knows the needs of the district. This state of things, in my opinion, can best be brought about by a permanent organization in each county, with committeemen or directors in every farming community.

The secretary of such local institutes soon becomes a regular correspondent of the State director. All communications are sure to come before the board at the regular meetings; the localities themselves decide where the meetings are to be held and hold themselves responsible for their success or failure.

Such an organization, wherever tried, has brought about the following results:

- (1) More and better meetings in each county.
- (2) A feeling of responsibility for the success of the meetings, because they are "ours."
- (3) A closer touch with the State department of agriculture.
- (4) Through organization, an opportunity of visiting and studying the methods of work employed by the State agricultural college and experiment station.
- (5) By virtue of the increased number and the regularity of the meetings, an opportunity is given and appreciated for carrying out a systematic study and discussion of the principles underlying the science and practice of agriculture.

I feel that I can not speak too strongly on the absolute necessity of organized effort in this educational movement if we are to raise the general standard of intelligence among our farming people. By this method alone between 35,000 and 40,000 farmers each year during the month of June visit the Ontario Agricultural College. The excursions are arranged for entirely by the institutes themselves, through their officers, with the railroad people. The college authorities set the dates, and during one month this year 48 separate farmers' institutes conducted successful excursions to their own colleges. The far-reaching benefit of this sort of work can not be estimated, and the fact that the average hundred acres in Ontario is producing more than it did when the virgin soil was first plowed is proof of the fact that such farmers at least are, as a body, from county to county and from township to township, employing better methods of cultivation, using up-to-date machinery, erecting better fences and buildings, using good judgment in the selection of live stock, and making a reputation for the Province along advanced agricultural lines. Secretary Wilson, in his report for 1904, said: "There is also a growing movement for the establishment of the institutes in the several States on a more permanent basis. The form of organization most approved is that of a strong local permanent organization in each institute district, combined with a system of oversight and limited control by the central State authority, whose duties and powers are prescribed by law."

Developing home talent for the institute staff.—While Anglo-Saxon spirit exists there will be much traveling done. Men will move from State to State and from ocean to ocean to learn and to teach; municipalities will always

want to hear the noted preacher, or scientist, or lecturer, or author, or actor who comes from afar off, and whose name is familiar in the household and whose face has oftentimes been seen in the best magazines. He comes and goes, and we look up our daily paper for the next attraction.

So it is in institute work. The man or woman we bring in from some other part of the country can only, as the darkey exhorter expressed it, "Supply the rousements." Continue such practice and we find the people clamoring for just such and not willing to listen to good local men. The next year the local secretary writes you: "There is no use sending us an ordinary speaker. We have had Mr. Blank, of Ohio, and Mr. Blank, of New York, and Mr. Blank, of Canada, and we must have some one just as good or our people will not turn out to the meetings." All know that this pace can not be kept up, and when we have reached such a state of over stimulation nothing but plain, ordinary home grown and home-made food will save the patient's life, and this will have to be kept up for years and years before the body politic is entirely recovered.

On the other hand, by developing local talent, by encouraging college graduates and other good farmers to take an interest in their local meetings, by insisting upon outside speakers confining themselves largely to introducing pertinent questions and allowing the farmers themselves to thrash them out, by having some one make it his business to personally see and invite to the meetings men of good practice to discuss certain definite subjects, by having these men later get into direct touch with their experiment station and so conduct experiments on their own farms, by having these men give the results of their season's work next year at the meeting; by these methods I have seen institute systems built up and become a power in the land.

The institute director.—If what I have said in this address applies generally to all institute districts in the United States and Canada, then the reforms must start at the head and go downward. If the importance of our work is as great and as far reaching as I believe it to be, then the brainiest men in the business should be secured for institute directors. These men should be paid as the chief officials in the industrial world are paid, viz, just what they are worth. But above all things, it is surely not asking too much in this essentially agricultural country that every State director be so compensated that he will devote his entire time to this important work. What is \$10,000 a year to Alabama with her 3½ millions of acres of cotton, and yet she appropriated last year only \$600 for farmers' institutes.

The same departmental report that credits Kansas with 77 millions of bushels of wheat last year, also contains the announcement that \$2,000 were used for farmers' institute work. In the great Empire State the director gives only a portion of the time to the work and is too busy with other things at this time to attend this meeting. In Wisconsin, where splendid work has been done for many years, the director is engaged in institute work but half the year, and in New Jersey the director is also secretary of the board of agriculture; while in Mississippi the president of one of the largest colleges of agriculture in America is also called upon in his spare moments to select speakers and arrange and advertise meetings of farmers' institutes for his State.

I make a plea at this time for this most important work, that it should receive better recognition at the hands of our State authorities, and that at least one man, with a competent office staff, should be assigned to farmers' institute work, and that alone.

In conclusion, let me say that I have tried to take up in this address just what is in my heart and mind in reference to the work. The good work you are all doing is bringing its reward every year. You must go on and on, doing the best you can with the financial help you can get and the faithful services of your own workers, keeping always in mind the one fact, that for the farmers of the great countries here represented nothing is too good and that every effort you can put forth toward the raising of their intellectual standard will be blessed by both God and man. In the words of Benjamin Franklin: "There seem to be but three ways for a nation to acquire wealth. The first is by war, as the Romans did, in plundering their conquered neighbors—that is robbery; the second by commerce, which is generally cheating; the third, by agriculture, the only honest way, wherein man receives a real increase of the seed thrown into the ground, in a kind of a continual miracle, wrought by the hand of God in his favor, as a reward for his innocent life and his virtuous industry."

DISCUSSION OF PRESIDENT'S ADDRESS.

TAIT BUTLER, of North Carolina. The president has told us that there are institutes and institutes. He means by that that there are institutes which meet his ideas and that there are institutes which are rather poor ones. I am going to add that there are institutes and institutes in another sense. When the institutes began, the one idea which was carried into the work was that of having a man well up in general farming or in some special branch of farming tell the results of his work to other farmers. As they developed new forms of work were introduced, and the institute consequently is no longer confined to the single original purpose. It seems to me that there is in institute work just now lack of unanimity of purpose. We have a great variety of views as to what the work should embrace, and we find no two men whose ideas agree as to what the purposes and objects of the farmers' institutes really are. Last year there were four addresses delivered at the meeting of this association, from each of which I desire to read brief extracts. Here is one: "The work of the institute is not so much instruction as it is inspiration. The institute is more a sentiment maker than it is a school." That was the sentiment of a representative from the great State of Illinois. Here is one the opposite of it: "The institute lecturer must first of all be an educator. The day of the agitator should have passed long ago. It is education, not agitation, that is demanded." This was an expression from North Carolina. Again, we have a sentiment from Indiana: "I am no longer sanguine of doing very much good in giving instruction to adult people;" and last, a sentiment from Connecticut: "The farmers' institute must become more and more a school of instruction, and the institute lecturer should be looked upon as one whose first duty is not to furnish entertainment, but instruction."

Now, it seems to me that one of the first duties of this organization is to clearly define the purpose of the farmers' institutes. Is it education? Is it to supply the "rousements?" Is it a sentiment maker? What is it? We are told that the purpose of the institute should be education, not commercialism. I am glad to say, Mr. President, that so far as your statement that the purpose should be education goes you have expressed my view. I am not sure, however, that the farmer should not be educated also along commercial lines. I am inclined to think that one of the reasons why farmers are not a money-making class or that farming is not a money-making business is because we, as farmers, do not know enough about business principles. I agree with the president that no man can tell another how to run his farm. There is but one man who knows how to run his farm, and that is the man who lives on it. While we agree about that, yet I want to say that I do not believe it is possible for a successful man in any line to tell those engaged in that same line of work what he has accomplished without doing some good. So I believe that there is need for the institute to continue to work on that side of the question.

On the question of permanent organization I do not believe that our president is competent to speak for us. Owing to the conditions existing in his country, the people, and their environment, it was not difficult for him to establish permanent institute organizations. Possibly he had just as great difficulties as the rest of us, but was able to overcome them. However that may be, I am satisfied that the institutes can never reach the stage of development and usefulness which they are capable of attaining until there are permanent institute organizations in every community. We all are to blame for the present condition of institute organization, or, rather, lack of organization, in the United States. While this is true of the country as a whole, I believe that we have greater difficulties in the Southern States than you have in the North and West in securing permanent local organizations. We have had to start down so low that we had to first show our people what a farmers' institute actually is. We had to go further and explain to them what an institute is not. They had an idea that it was a kind of political "rousement." This had to be corrected, and it has taken time and much effort to disabuse their minds. In consequence of this misapprehension of the purpose of the institute, we who have been engaged in this work in the Southern States have found it difficult to effect permanent organizations. The people say, "We are not ready for it." If we had admitted this excuse, no organization could ever have been secured. We had an example of that this year with women's institutes. They said, "We are not ready for it." Nevertheless we went ahead and organized the institute, and it is a success. I know that if I had waited five years, they

would have still said they were not ready for it. They never would be, if we had waited for them to start it.

One word with regard to institute directors. I mention them because they illustrate the fact that we are not taking our institute work seriously enough. We are responsible largely for the institute director having other work to do. We as institute directors have not taken a large enough view of the importance and scope of our work. We act and seem in most cases to feel as if our work was but a side show in education. We are content with a very meager appropriation for its support. We as directors give our best strength and preponderance of time to something else and give but slight attention to this great school of agriculture for which we have assumed responsibility. If we were to take the proper attitude every State would now have an institute director giving his entire time to the development of the institute work. So long as we are satisfied that the institute shall be pick-up work we will never have either permanent organization or satisfactory institutes.

After the calling of the roll of States, Territories, and Provinces, and the admission of new members the association adjourned until 2 p. m.

AFTERNOON SESSION, MONDAY, NOVEMBER 12, 1906.

The convention was called to order at 2 p. m. by President Creelman.

The following reports of the various States, Territories, and Provinces were submitted. (The statistical data will be found in the tabular statement, page 88.)

FIVE-MINUTE REPORTS FROM THE STATES, TERRITORIES, AND PROVINCES.

ALABAMA.

By C. A. CARY, *Auburn.*

(See statistical table.)

ALBERTA.

By H. A. CRAIG, *Edmonton.*

I have only recently assumed the institute work in this Province, and can therefore only make a general verbal report to the effect that some fifty institutes were held last year, and a special seed train was run during the summer.

ARKANSAS.

By W. G. VINCENHELLER, *Fayetteville.*

There has been no new work inaugurated. All the work that has been done has been along the lines heretofore undertaken by the experiment station. We can not nearly fill all the appointments that we are solicited to fill. We can not begin to cover the State as we would like to, but we have done the best we could along these lines.

CALIFORNIA.

By E. J. WICKSON, *Berkeley.*

The new feature of our work for last year consisted in formal and organized cooperation with the State Teachers' Association, whereby a farmers' institute became a section of their annual convention, chiefly for the discussion of motives, purposes, and methods for the introduction of the study of elementary agriculture into the public schools of the State. As an immediate result of this effort

we are invited to repeat the effort in another part of the State, where the State Teachers' Association will meet this year, and we also have engaged to take part with district teachers' associations in the same way. The teachers of California are enthusiastically promoting institute work.

COLORADO.

By F. P. JOHNSON, *Denver.*

Last year was the first institute work done in Colorado in a regular way, and in most instances our work was largely introductory in character. Our workers were confined mostly to the faculty of the agricultural college, although we have succeeded in developing some very good workers from local talent. During the present season we are taking up the work in a more special manner, limiting the number of subjects to be discussed at an institute but handling these subjects as fully as possible. During the past year we covered practically all the agricultural portions of the State and created considerable interest. We expect during the coming winter to secure the passage of a farmers' institute law in this State, after which the work here will be put upon a permanent and more satisfactory basis.

CONNECTICUT.

By H. C. C. MILES, *Milford.*

[For the Pomological Society.]

Institute work in Connecticut for the season of 1905-6 has been conducted as for several years past, by the three separate agricultural organizations, viz, the State board of agriculture, the State pomological society, and the State dairyman's association. In the case of the two latter organizations, with increased State funds at their command, more institutes have been held than in previous years, the work has extended over a wider territory, and a larger number have been reached and benefited.

The institute work of the Pomological Society has been carried on in all of the eight counties of the State and with very satisfactory results. Most of the meetings are in cooperation with the local granges and for the most part are held in series of three or four each week. The aim has been to reach those communities remote from the railroads and where institutions have not been a frequent occurrence. In a few instances evening sessions have been tried, but these do not seem to be as popular or as well attended as we could wish.

The lecturers comprise the staff of the experiment stations and agricultural college and practical fruit growers and farmers. Thus far all have served without pay for services, accounts simply of traveling expenses being rendered. No outside lecturers have been employed this year.

The institute is exerting a very helpful influence on the agriculture of the State, and the future holds out great possibilities for the development of this work. Probably Connecticut will continue for some time to divide its efforts along institute lines, the tendency being for each of the organizations engaged in the work to stick pretty closely to its own special lines in the character of the institutes held. Since horticulture and dairying are the leading branches of farming in this State, fruit and dairy institutes are most popular. However, it is believed that ultimately the State must adopt a change in its system of institutes, combining its forces and enlarging its efforts, with a central official in charge. We will work toward a plan as practical and satisfactory as those of our sister States.

By J. G. SCHWINK, Jr., *Meriden.*

[For the Dairymen's Association.]

The Connecticut Dairymen's Association is an institution created and organized twenty-five years ago to develop and improve the dairy and allied agricultural interests of the State. It consists of a board of officers and directors and a membership, either life or annual, of those interested in the promotion of progressive dairying and agriculture, who are interested enough to join its ranks and help along in the good work. The membership at the present time numbers about 400. Its officers consist of a president, vice-

president, secretary and treasurer, and a board of directors, one from each county of the State.

The association has, for the past twenty years or more, received an annual appropriation of \$1,000 from the State to help carry out the purposes for which it was created, but during the past two years, owing to the popular demand for more extensive institute work, and as the finances of the association were not sufficient to meet this demand, an increase of \$500 was asked of the legislature and was granted. This money, we believe, has been wisely and economically expended during the past two years, and has resulted in more and more frequent calls from all over the State for dairy institutes. The influence and inspiration that have gone out from these meetings are beginning to show permanent results in many parts of the State. New barns and stables have been built after the most modern methods of sanitary construction. More thought and care is given to the dairy herds, both as regards feeding balanced rations economically and in the production of these rations for the cows, as far as possible, on the farm. Silos for the storing of immense crops of corn, for which this State is famous, are springing up on every hand. The keeping of records of individual cows is a special feature of the educational work of the association, and is resulting in its adoption by nearly all of the progressive dairymen. The art of breeding and rearing the dairy cow is receiving attention and is becoming one of the leading subjects for future meetings of the association. Also the matter of the preservation of soil fertility.

This State dairymen's association cooperates, through its directors, with the granges and farmers' clubs of the several counties, who are in position to know their local needs, and by arranging with the secretary a well-managed series of meetings is planned, whereby the association is able to procure leading speakers of State and national reputation to address the several meetings at a minimum expense for each meeting. We also utilize our own progressive men, both professional teachers and actual, successful working dairymen, and farmers, who present valuable contributions to this educational system and who are meeting with their reward, not from a hard-moneyed standpoint, for their presence and help at the meetings are all free, except the actual traveling expenses, but in the consciousness of having done their duty under the motto: "Freely ye have received; freely give."

The new work taken up by the association during the past year is but a continuation of the old system, except that it has reached out into new places where meetings of this kind have not been held before, and the association has endeavored to make the meetings more interesting, practical, and helpful than ever before. We believe it is exerting a great influence for better farming, as is attested by what is seen on every hand and by the constantly increasing attendance at the meetings. The great round-up annual meeting last year resulted in an attendance of over 650 interested people at each session of the two days' meetings. Our field meetings are also very largely attended, and we have some very valuable lessons presented at these meetings. We expect still greater results in the future.

DELAWARE.

By WESLEY WEBB, *Dover*.

(See statistical table.)

GEORGIA.

By H. C. WHITE, *Athens*.

(See statistical table.)

HAWAII.

By JARED G. SMITH, *Honolulu*.

A new phase of work to be inaugurated in our next farmers' institute meeting, to be held in Honolulu December 20-22, 1906, is in connection with the Second Annual Hawaiian Poultry Show. It is planned to hold a farmers' institute session at this time, and in addition an exhibition of Hawaiian fruits, flowers, and vegetables, fodders, and miscellaneous agricultural exhibits, among which the Hawaii Experiment Station will exhibit a collection of honeys, silk

in various stages of production, and a series of fruit packages illustrating those which proved most satisfactory during the station's recent fruit packing and transportation experiments to the Pacific coast.

During the last several meetings of the farmers' institutes of Hawaii an effort has been made to have the subjects of the several addresses of each meeting pertain to a single definite branch of agriculture, rather than to discuss subjects widely removed from each other.

ILLINOIS.

By F. H. HALL, *Aurora.*

Old methods developed.—The Grout corn-judging contests were inaugurated in 1904-5, and twenty-nine counties adopted this plan last year, and it is believed that it will be adopted in upward of fifty counties this year.

The plan, devised by Hon. A. P. Grout, of Winchester, Ill., provides for a test of skill in the judging of corn, the premium to the winner being a trip to the agricultural college in January and two weeks' instruction in subjects of practical importance to young men on the farm, such as judging corn, testing seed, operating the Babcock machine, practice in stock judging, knotting and splicing ropes, adjusting farm machines, etc.

As a rule only young people were admitted to these contests. In 1905-6 about 75 boys were sent to the winter short course through these contests, and as many more went without being sent (paid their own expenses), who would not have been interested in this work but for the institutes. One county sent one boy and paid half the expenses of another; seven attended. Another county offered the short-course premium to one boy in each township in the county. Each boy attending the short course on his return home became a little agricultural college extension center. It is the expressed opinion of Professor Rankin, superintendent of agricultural college extension of Illinois, that at least half the boys in attendance upon the short course will return for more extended instruction.

New work inaugurated.—(1) This year bread-judging contests are opened to the girls in a few counties. The premium to the winner is a trip to the agricultural college with two weeks' instruction in household science. In several counties the institutes have already been held and many young women have earned the premiums of a trip to Urbana. In one county the premium exhibits were sold at auction. The sales amounted to nearly \$90. With this money two boys and two girls will be sent to Urbana for two weeks' work in January.

(2) In Scott County Mr. Grout prevailed upon the business men's association of Winchester to offer to one boy in each voting precinct (there are 13 precincts in the county) \$10 toward defraying his expenses to the winter short course. The entire expense will be about \$15 for each boy. The plan for selecting one boy from each precinct to whom this premium should be given was as follows:

A few days before the institute (it should have been weeks) a 14-page bulletin on "Soil fertility" was distributed among the young people in the public schools in the county. The pupils were requested to study the bulletin and report at the institute for examination. The one standing the highest in each township was to receive the premium.

On account of the shortness of the time for advertising and for preparation only 15 boys, representing 9 precincts, appeared at the institute. Some of these boys had excellent papers, and at least 9 precincts of Scott County will be represented at Urbana this winter. It is Mr. Grout's opinion that not less than 20 boys from Scott County will present themselves for instruction at Urbana in January.

It is our purpose to use the stimulus of competition only so far as it can be made to contribute to the educative value of the work. In this we are sometimes defeated, and recently in one instance we ran up against the fatal combination of a farmers' institute, a county fair, and a wild-west show. It would not be proper to say that the institute suffered—it died without a struggle. It is difficult to figure the properly balanced ration for an institute. Entertainment and instruction must under present conditions both be provided. In the evolution of the institute, at first entertainment, including competition in great varieties, seems necessary to its existence; but, little by little, the entertainment becomes instructive and the instruction itself becomes entertain-

ing. It is possible to measure the agricultural intelligence of a community, or, perhaps I ought to say, of those members of the community in charge of the institute work, by the character of the ration which it demands for the institute programme.

INDIANA.

By W. C. Latta, *Lafayette.*

At the conference of institute workers held in October, 1905, the importance of work for and by the boys and girls, at the farmers' institutes, that would tend to interest them in and prepare them for the work and life of the farm was especially emphasized.

In several counties the county superintendent of schools, in cooperation with the county chairman of farmers' institutes, organized boys' and girls' clubs for growing corn, making bread, etc., and for competitive exhibition of same at farmers' institutes or under other auspices.

Many boys were induced to grow corn and compete for premiums offered by the business men of the towns interested. Much interest in a few counties was awakened, and as a result there were several excursions of boys and girls with their parents and friends to Purdue University and the experiment station. Only a beginning has been made, but it is believed that the work will continue wherever begun and spread into many other counties in the near future.

In accordance with the requests of many chairmen for the discussion of subjects in the line of food, household management, and home making, Miss M. M. Mather, a trained domestic science instructor, was employed throughout the institute season of 1905-6.

Miss Mather's work was highly successful, and from almost every point that she visited requests have come for similar instruction in the near future.

LOUISIANA.

By CHARLES SCHULER, *Baton Rouge.*

The old methods have been developed by cooperating with the various railroad lines in joining their lecture force with exhibit car and holding institutes at different towns along their lines.

In the way of new work, we have in addition to the lecture corps, made up from the State experiment stations and agricultural college, obtained assistance from the lecturers connected with the industrial college, which enabled us to take up the questions of domestic science and the advantages of education along agricultural and industrial lines. The Louisiana State University and the Agricultural and Mechanical College also rendered valuable cooperation in placing with the corps an expert dairyman who has brought this feature of an important industry to the attention of our farmers. I also employed the services of a successful poultry raiser, whose lectures were appreciated and listened to with attention. Altogether we have reason to feel encouraged with the work that has been done along these lines, but we are somewhat handicapped for lack of an experienced man as director of farmers' institutes who can devote his entire time to this work, and in connection with the work it has occurred to me that some action should be taken toward securing the active cooperation and assistance of the National Farmers' Institute specialist, by which one or more competent lecturers could be furnished to assist in the institute work.

I want to say that the cause of the small amount of money expended in Louisiana is the fact that we draw our lecturers mostly from the department of agriculture of the agricultural college and experiment stations, and that free transportation has been furnished to the lecturers of the institute corps by the railroads. We made an effort during the past year to have a regular institute conductor in this State, and tried to get the legislature to pass a law to that effect, but we failed in our efforts. The institute work in Louisiana is not what it should be, but we hope to have a better report next year.

There were many things which contributed to keep the attendance down last year, chief of which were the yellow fever and the quarantine.

MAINE.

By W. D. HURD, *Orono*.

During the past year the University of Maine, the State department of agriculture, the Bangor and Aroostook Railroad, and the Maine Central Railroad, working in conjunction, have run two special trains. The first trip over the Bangor and Aroostook line occupied eleven days; thirty-one meetings were held, reaching about 10,000 people. The trip over the line of the Maine Central Railroad covered fifteen days, during which time forty-five meetings were held, with an attendance of about 30,000 persons.

The trains consisted of three baggage cars, in which were placed, by the college of agriculture and experiment station of Maine, exhibits showing appliances for dairy work, poultry raising, orcharding, gardening, seed testing, educational displays of fertilizers, feeds, a veterinary exhibit, and forestry and paper-mill exhibits.

At least two hours were spent at each stop, during which time two or three talks were given from the station platform or in the cars, and the people were shown the practical use of the appliances on the train.

The trains were furnished free by the railroads; they were equipped by the university; and the expenses of the speakers were partially paid by the commissioner of agriculture out of State funds.

MANITOBA.

By J. W. BLACK, *Winnipeg*.

Special report on new work.—It will be seen from the statistical statement that the institutes of Manitoba are comparatively few in number. They are in their infancy and up to the present have had no very special features, with the exception that last year there was a traveling institute train equipped with lecturers which stopped at advertised stations, and from which were delivered hour addresses. This enabled the department to furnish a better lecture force and to accomplish more in the same length of time than any other course we could have adopted. Outside of this special-train feature we furnish lecturers who meet the different institutes from once to thrice per year, and who lecture on important subjects of agricultural science at these institute meetings. These two features of our institutes seem to have met all the demands of our people so far. We also have another special feature by which the institutes establish cheese factories and other branches of creamery work and permit them to use institute funds in this direction, as well as appropriations furnished by the department to supplement funds of the different associations.

MARYLAND.

By WILLIAM L. AMOSS, *Benson*.

On invitation of the Carroll county school board, through Dr. S. Simpson, the superintendent, our department of farmers' institute sent Prof. Charles Goodrich into the country one day each week for the fall term to teach agriculture in rural schools and direct teachers in his methods for periods of one hour. The selection of schools was unfortunate, only two schools profiting by his visit. The results demonstrated great possibilities in the traveling special teacher.

The most important movement among our farmers during the year probably was the organizing of the tobacco growers. Prices had continued to decline until there was no longer a profit to the grower. We are happy to report that prices have materially advanced since the influence of the organization has been felt.

A tobacco special was run through southern Maryland to instruct in methods of improving the crop by seed selection, and also showing by charts the results of selection. It is too early to report results, though we can advance the opinion that they will fully repay the effort. Our steamboat special proved more expensive than was anticipated, partly on account of a storm and an unseaworthy boat. Three subjects were handled at the same time—tobacco, a class for boys in selecting seed corn, and poultry. Conditions are such that good work can be done through boat service.

The institutes were of one and two days. If the demand is strongest for a report showing large attendance with places visited than the director's opinion of the character of work that was done, then we advise the one-day meeting of two or three sessions. The one-day meeting will lower the number of good available workers and also proportionately increase their pay. The two-day institute of four or five sessions should be announced as our preference, but the one-day institute should have reasonable recognition.

A seed-corn class for boys was the work of the first session at each institute, but the attendance by boys was not encouraging. The worker well grounded in the fundamental principles of his agricultural practice, who can recite his experience where his practice has paid in dollars and cents, is most popular with us.

A strawberry and sweet-potato special run over the Annapolis Short line on request of Mr. Shellman Brown, general manager, convinced us that to treat two subjects at the same time is not good institute practice on a railroad special.

The milk special run March 23 to 27, inclusive, was in our opinion the best work that has come under our observation. Two addresses of fifteen minutes each following one another, the first by Doctor Fulton and Doctor Jones, of the health board of Baltimore city, when what the city should have was explained, and the second by Jared Van Wagenen, who, pointing out why the dairyman should meet the demand and how he could do it at slight expense, made an impression alike on distributor and producer, at the same time gave some points to health board and railroad officials. To study the needs and requirements of our markets and ways the producer can meet them and to use the railroads and boats to lay the facts before their patrons is practical institute work.

The negro institute conducted by the Princess Anne Academy, Prof. Frank Trigg, principal, received our support and help. It was very gratifying to hear talks at this institute from members of this race which were convincing that there are some among them who make farming pay. A talk on sweet-potato growing by one of these men contained as many important facts as are expected from our best workers, and was convincing that his practice gave results when he pointed out three of his children whose tuition and board he was paying from his potato crop. This institution is doing good work and is capable of better, could the negro be impressed with what I believe to be a fact, that the cultivation of land has more promise in it for him than the learned professions. A negro with a farm home, comfortable and well tilled, commands respect. The institute superintendents in the Southern States would do well to work for better negro farmers.

The picnic offers another opportunity and is another problem for the institute director. It is not a time nor is it the place to be serious, and yet it is a duty thrust upon us and becomes one we must accept as one of the opportunities to drop a seed in too often unwilling soil. Here seems to be the only place I have found for the funny farmers' institute worker. He should be endowed with abundance of common sense and tact, or he is not worthy of his profession. Short talks from the platform, full of suggestive topics of conversation and supported by a warm heart and welcome hand, are ideal. The picnic is one of the doorsteps to an institute.

August 14 was the beginning of our cooperative work with the experiment station at six of our county fairs. The agricultural fair, as we find it more especially in the East, is a place of amusement rather than an educational institution, though it masquerades as such when it uses the State appropriation. Yet the institute superintendent and the experiment station director must accept it as the State would have it, though their eyes see that of which they must not write. For them it is a better-organized institution than is the picnic, and offers a greater opportunity to thicken the sauce of mirth with the germ of reason. Our methods have been along the line that promises to harmonize with the other keys of the instrument. While we feel we have not been entirely successful, we believe we are learning the air and will soon be a candidate for the leader of the band. Are we equal to the task? I believe we are. But here all our talents have full play, and at times we feel a need for more. We are supposed to be a dry lot, and not to startle the critic and set his tongue wagging. The State assumes that the purpose of the agricultural fair is to entertain, elevate, and educate the whole people. We go to the fair as State workers, and work for the whole people; here we find them in holiday attire, bent on a good time. We assume the task of helping them. First, they must be made comfortable. We provide a tent with chairs,

table, some literature, and writing materials, and check baggage. Second, we entertain them with national airs from a phonograph. We announce that we are present to help the fair officials entertain and educate the people. The phonograph reproduces addresses of a thousand words on "What the agricultural college will offer the following season." "The work of the experiment station," "The San José scale," "The health board's requirement for milk," "How the farmers can meet this requirement," etc., with *My Maryland*, *The Star Spangled Banner*, and other popular airs dropped between. In the rear of the reception tent is a dark room, with comfortable chairs, where the attendant every hour illustrates with a stereopticon a fifteen-minute lecture by a member of the college or station staff, or, in their absence, himself or the manager. Our business is to be always agreeable and ready to deal out information as gladly as the expert faker, whose place we are endeavoring to fill. We are convinced we can succeed, but being new work the expense is discouraging when backed by a small appropriation. The work is hard and can not be classed among the pleasures.

The summer school was another name for the institute round-up. It was a trial of what we believe will be the approved programme in the future of such meetings at places where the opportunities are offered as they are at the agricultural college, and probably conditions can be made favorable for these methods of teaching at least one institute in each county. The meeting was at the agricultural college. The programme was divided into three courses—agriculture, horticulture, and for women. The period for each course was one hour. Members of the faculty met the patrons in the class rooms, where it was usual to do their work. Time was given for field work or illustrations. The woman's course embraced dairy methods, milk, butter, poultry, home sanitation, care of children, household emergencies. The horticultural course covered insect control, plant disease, care of orchards, and other subjects. Agriculture covered farm machinery, fertilizers, judging farm stock, and others. Three lectures were given at the same period, one in each course. Patrons were required to register their names and the course selected and receive a ribbon indicating their work. Since the patrons returned home we have heard from two-thirds of them, who report that they were well repaid for attending, and advise another meeting, with a programme following the same system.

We are preparing to help the farmers' club with the phonograph. Short, pithy addresses supplied by the experiment station for reproduction on an instrument owned by each club will provoke discussion in those bodies when the presence of a professor would embarrass the members and prevent it.

MASSACHUSETTS.

By J. L. ELLSWORTH, *Boston*.

No particularly new features were introduced into the regular institute work during the year. The circuits of institutes system which was introduced several years ago was again put into practice, but it did not appear advisable to increase the number of circuits or of meetings. More regular meetings were held than for a number of years, and the attendance, both per session and in aggregate, broke all previous records. The work has been strengthened in places where weakness existed and pushed with energy where the local conditions already made for strength.

The principal new feature in the way of agricultural meetings introduced during the year was the better-farming special, with exhibits and lecturers, which covered a portion of the Boston and Maine Railroad system in Massachusetts, New Hampshire, and Vermont. The agricultural college, the experiment station, and the board of agriculture cooperated to make this a success, and it was very well received. Doubtless something of the attendance at these meetings was due to the novelty of the idea, but nevertheless the success was such as to warrant a repetition of the effort if the railroads can again be induced to cooperate.

The special summer meeting of the board, held at Fitchburg, is also included, though really held in July, but it appears to be a part of the work of the year just closed rather than of the next year. It was unusually successful, with an aggregate attendance estimated all the way from one to two thousand. One thousand two hundred would appear to be a fair estimate. The demonstrations were received with a great deal of favor, and new features were introduced with considerable success.

MICHIGAN.

By L. R. TAFT, *Agricultural College.*

The institutes in Michigan have been carried on during the past year without material change in the methods. The local arrangements have been looked after by the officers of the county institute societies, and two-day institutes have been held in nearly all of the counties. In addition to the two-day or county institutes, 257 one-day institutes have shown an attendance of 57,148.

The work of the year was inaugurated with a normal institute lasting five days at the agricultural college. The speakers, with two or three exceptions, were present for the greater part of this time. The programme consisted of lectures by members of the agricultural college faculty, which were designed to furnish the regular lectures with the recent developments in agricultural science and practice. Another series of addresses were given by the heads of several of the State departments and commissions, such as education, forestry, highways, and dairy, upon the progress and work of the past year. A considerable portion of the time was occupied by addresses from the regular State lecturers, those selected being the ones that were most likely to be used during the winter. Abstracts and outlines of these were prepared in advance and distributed at the different sessions. At the close of each address opportunity was given for questions and criticism. Another feature of the normal institute was the inspection of the work of the different departments of the college by the lecturers, so that they would be better prepared to answer the questions that might be asked at the institutes, and thus in a measure advertise the college.

During the winter an endeavor was made when making out the programme for an institute to include topics that were likely to be of live interest at that point. Thus in some sections topics relating to forestry were placed upon the programme, while in others good roads, corn improvement, rural schools, sugar-beet culture, or sheep feeding were given greater prominence.

In quite a number of counties there has been a call for a speaker to act as judge of the corn exhibits, for which considerable prizes were frequently offered, and at the normal institute, to be held during the present month, one of the features is to be a class in corn judging for the institute lecturers.

In all of the work an endeavor has been made to interest the young people. They have frequently been placed upon the programme, although no special meetings have been held for them. Several counties, however, have offered prizes for corn growing by boys under 18 years of age and they will present the results of their efforts at the institutes this winter.

Increased attention has been paid to educational matters, and several of the county secretaries have arranged with the superintendents of schools of their counties to furnish a speaker for the joint series of institutes to last from four to twelve days. During the forenoon the county commissioner of schools, with the speaker he furnishes, visits the schools in the vicinity of where the meeting is to be held and in the afternoon the schools are dismissed so that the teacher and the older pupils can attend the institute. The regular farmers' institute speaker gives an address at each session of the institute upon topics relating to farming, and in the afternoon and evening the speaker furnished by the county commissioner of schools, and perhaps the commissioner himself, will take part in the programme, speaking upon topics that relate to rural schools and country life.

During the past year in particular a campaign for better roads has been made. In this we have had the assistance of the State highway commissioner and his deputies, who have attended institutes in fully one-half the counties in the State. To a somewhat smaller degree the State dairy and food commissioner has coöperated in the work by furnishing from his office and field force speakers upon dairy topics for a number of institutes. The State forestry commission coöperated in a similar way.

During the first two weeks in April a corn special train was run for eight days upon two of the leading railroads, and 49 stops were made. The train consisted of a baggage car and two coaches; the latter were used for the meetings, while the baggage car was used for an exhibit of varieties of corn and apparatus for storing and testing seed corn and for corn-growing machinery. Although the usual number in attendance was from 100 to 150, in a few places from 200 to 300 farmers met the train. The stop at each place lasted about one hour and it was divided so that each person could listen to two talks of twenty minutes each upon corn culture and corn improvement, and spend

about the same time in inspecting the exhibit in the baggage car. Much interest was shown in the corn special and many of those in attendance have since reported that they were greatly benefited. Two other roads in addition to those taking part this year have arranged to furnish a train next year.

The weather during the institute season of 1905-6 was much more favorable for securing an attendance than for the two years previous, when quite a number of institutes had to be abandoned, as neither speaker nor farmers could reach the place of meeting. The general average was fully 25 per cent larger than in previous years and there was also a considerable increase in the number of institutes.

At the present time the institute work in Michigan is in excellent condition, as not only are the presidents and secretaries of the county organizations doing all they can to make the meetings successful, but the vice-presidents who have charge of the one-day institutes have also taken hold of the matter and each is doing all in his power to make his local institute surpass any that has been held in previous years.

MINNESOTA.

By O. C. GREGG, *Lynd.*

We have held a few sessions of what we call a short course in agriculture, covering a period of one week—that is, six days. These meetings were held upon the receipt of pledges from farmers that they would give us that amount of time at the institute session. There was no attempt made to give popular addresses, but the speakers employed were plain, practical men, of long experience in their particular lines. These meetings were decidedly successful, and, personally, we are inclined to extend them as opportunity may offer.

MISSISSIPPI.

By E. R. LLOYD, *Agricultural College.*

Last year we had yellow fever in our State and all over the South, and we held fewer institutes than we usually hold for that reason.

In this State most of the institutes are held during July, August, and September. These months are selected for institute work for the reason that at that season of the year most crops have been "laid by" and farmers have more time in which to attend the meetings. This is also the vacation season for college and station men, who do 75 per cent of the institute work. These men receive no extra compensation for this work. In addition to the college and station men, we employ each season from six to eight speakers from other States and from among our best farmers.

It is very gratifying to the management to note the increased interest in the work by the farmers, which is shown by an increased attendance, better interest, and requests for more meetings. This season we had as many as eight requests from one county for meetings. We hope to get from our next legislature an increased appropriation, so that the work can be extended. During the year there were held 140 one-day meetings and 2 two-day meetings, besides the annual round-up of three days which is held at the agricultural college. The total number of sessions was 284, with a total attendance of 17,645.

The spare time before the institute opens in the morning and after the close in the afternoon is spent in visiting the nearby farms, becoming better acquainted with the farmers and more familiar with their individual problems. This plan has established a very kind feeling between the farmers and the lecturers and has greatly increased the farmer's confidence in the ability and willingness of the college and station men to help him solve his agricultural problems.

The only distinctly new line of work taken up this year was the running of a diversified farming special train over the lines of the Illinois Central and Yazoo and Mississippi Valley Railway systems.

The train consisted of two day coaches fitted with raised platforms for speaking, a baggage car, diner, and sleeper. The complete train was furnished without cost to the institute management. The train made 75 stops in the State, and we spoke to 9,127 people. This method of holding institutes seems desirable, since it enables a few speakers to reach a large number of farmers in a short time. We hope in the future to get other roads to cooperate with

us in running institute trains. We have always found Capt. J. F. Merry, general immigration agent, and Mr. J. C. Clair, industrial commissioner, interested in every movement which had for its object the upbuilding of agricultural prosperity in the States through which the Illinois Central road runs, and too much credit can not be given these gentlemen for the success of the first institute train run in Mississippi.

MONTANA.

By F. B. LINFIELD, *Bozeman.*

In the farmers' institute work in Montana we have been trying to make a more efficient use of the funds at our disposal. By carefully planning and systematizing the work we have tried to visit more places and give more time to each place visited and to interest and reach more people. That we have in a measure succeeded is shown from the following table taken from the Fourth Farmers' Institute Annual:

Number, attendance, and cost of farmers' institutes in Montana.

Year.	Number of—			Attendance at meetings.	Funds spent.
	Towns.	Days.	Sessions.		
1901-2.....	17	22	(a)	.....	\$2,630.05
1902-3.....	33	35	43	1,543	2,936.44
1903-4.....	39	43	72	4,439	3,950.47
1904-5.....	47	53	100	6,946	4,000.00
1905-6.....	63	77	133	7,890	4,000.00

a No representation.

Last fall before the institute work started we tried to get together as many as possible of the institute workers, that we might give them a deeper insight into agricultural science and to discuss with them methods and practices that would add to the value of the work. While not as many as we hoped could come, yet those in attendance were very much pleased with the meeting.

NEBRASKA.

By E. A. BURNETT, *Lincoln.*

(See statistical table.)

NEW HAMPSHIRE.

By N. J. BACHELDER, *Concord.*

(See statistical table.)

NEW JERSEY.

By FRANKLIN DYE, *Trenton.*

Men and women who have the ability to organize, direct, and push things are in demand in every calling to-day. We need them on the farm, in the factory, the school, the college. The railroads are after them, and they are needed in our State and general institute work—men and women possessing knowledge, wisdom, tact, discretion, old-fashioned common sense, able to lead, wise to direct, and capable of enlisting the interest of others. Some such, a large number, have been discovered. They have taken hold of their part of our work and it is growing—growing in the number of meetings, the numbers attending, and their intelligent interest in the subjects presented.

Is the institute work in New Jersey paying the State for the money expended? Does it pay in other ways?

Studying our agricultural productions financially we have gone steadily forward. For the past seven years returns from our staple crops have increased from \$43,303,847 in 1900 to \$75,934,591 in 1906, and much of this

increase is due to the teaching done in the institutes, and the money cost to the State has been less than \$10,000.

For \$10,000 there is a return of \$30,000,000. Of course, we do not attribute all of this increase directly to the institute; but it has correlated information not always available to all farmers alike, brought the different parts together, and presented them at the institute in such a way that even the ordinary farmer could grasp the ideas presented and make them avail to his purpose and profit. The focusing of needed information, at a given place and time, for a community engaged in the same general occupation should be to their advantage, if they will apply it in practice.

Again, looking at this work in the matter of improved buildings and surroundings, we find a very marked advancement. Homes are tidied up and painted, and conveniences and comforts introduced that were not ordinarily found in a farmhouse years ago. So, too, the outbuildings. They are made attractive instead of repulsive, as so often they once were. Farm stock is housed and made more comfortable and more profitable, too. The doors swing on their own hinges, fences are able to stand alone, machinery is sheltered, and roads are improved.

Coming to the occupants of our farm homes, the value of organization and the teachings of the institute and the grange is even more marked. Education is appreciated and sought as never before, and farmers' children are availing themselves of the opportunities offered, not only in the usual lines of education, but in increasing numbers of those offered at our agricultural colleges.

Farmers are beginning to realize the fact that agricultural education is needful for intelligent agricultural practice and profit. Mother earth has never yet been able to bring forth her plenitude of harvests because of the ignorance or stupidity of those who have tilled the soil. The millennium of agriculture awaits the coming of the educated, and agriculturally educated, farmer. We are emphasizing the necessity of such education at our farmers' institutes. If they provide this, the fear of Sir William Crooks and others, that our food supplies will be so decreased for the want of new lands that the race will starve, will never come to pass.

In some sections of New Jersey the increase in the yield of wheat per acre has doubled within the past ten years. And there has been a marked increase in other crops as well, due wholly to more intelligent management. So we are trying to develop old methods first, not however ignoring the new.

The question of soil improvement has been prominent in our work for several years past. It has been treated by our soil specialist and chemist, Dr. J. G. Lipman. It is part of our programme for this present season also. Soils adapted to certain crops and the plant food to apply to each are discussed. In the soils of our farms are treasures undiscovered. The searcher after profitable returns, when he brings a higher intelligence to bear, where merely routine farming obtained before, surprises the superficial farmer, and sometimes even himself, as possibilities unfold not hitherto believed to exist.

The old farmer may be well informed on these points, but we have an increasing number of city business men who are locating on our farms, and they want to become good farmers; many of them are. Knowledge of these questions is important to them and to the young men who wish to do better on the farm than did their ancestors.

In New Jersey, furthermore, we have a great variety of soils and a corresponding variety of crops, and, best of all, a near-by market for everything we can produce. Our institute teachings and discussions must be adapted to these varying conditions, otherwise they would be of little benefit. In addition to the regular lecture, we use diagrams, printed tables, the stereopticon, and any other helps that will make the truth more vivid and more easily grasped.

No startling new lines of work have been introduced. We have not started the railroad and the automobile institute, although there are portions of the State where such means of instruction might be appreciated; but we do bring forward new things sooner than the work seems to demand.

For the first time in our work a field meeting of our farmers was held under the auspices of the State board of agriculture and of the State agricultural college. The date selected was August 17. The day was fine, and the farmers, with their wives, their sons, and their daughters, assembled from every part of the State. Short addresses were made by several persons, after which lunch was served, and then the farmers inspected the farm, the crops, the stock, etc. They enjoyed the day, and although the meeting was not of an institute character, it promoted a wider acquaintance and fellowship among the farmers

of the State and unified our work in their estimation to a degree not hitherto secured. We believe it will be of lasting benefit. They requested a similar meeting for 1907.

NEW YORK.

By F. E. DAWLEY, *Fayetteville.*

In relation to the special lines of work which we have taken up during the past year we have increased the number of special bee keepers', poultry breeders', and fruit growers' institutes. We are continuing our line of work of securing the teaching of agriculture in the rural schools, and have succeeded to such an extent that throughout the grades the department of education have arranged their curriculum so that nature study, biology, and agricultural instruction receive credits, looking toward the granting of regents' certificates on the same basis as other studies. At every institute held we now give one lecture devoted to awakening more interest in this matter and looking toward the adoption of this idea into the curriculum of all rural schools in the State. We feel that we have accomplished a great deal in this direction.

We are continuing our work of attempting to popularize alfalfa growing and feeding. The little area of alfalfa which has been growing at Fayetteville for forty years seems to be the nucleus around which the growth expands, and while this area has more than quadrupled in size during the past two years, other centers have also been established, and the growth from these is very satisfactory.

The systematic campaign which we carried on in relation to the selection, better feeding, and better care of dairy cows for some ten years was so successful that we are much encouraged in the line of work we are now undertaking. In a State department of agriculture cow census, taken some twelve years ago, it was clearly demonstrated that the average milk production of the cows in New York State was 3,000 pounds, and that they would be able to make 127 pounds of butter per cow. During the ten years in which we kept continually working to encourage farmers to improve their cattle, to select them more carefully, giving detailed information as to how best to know a good cow, the milk yield increased to 4,600 pounds per cow and the butter yield to 187 pounds per cow.

Our work at the institutes on good roads, more than any other one factor, brought about the passage of a bill appropriating \$50,000,000 for State aid to good roads and encouraged very many local road officials to take more pains with the sections of road under their care.

The work which we are doing among the children is most gratifying. At most of the institutes held last winter and at most of those being held this winter we gave, not, as you say in your last report, institutes for boys and girls, but a period in one session at which two or three speakers make ten to fifteen minute addresses particularly adapted to children, and the children from the grades, usually above the fourth, in the schools in villages and the entire school in the smaller places, are invited to come to this session.

Along the line of new work we have established women's institutes, which seem to be of considerable interest and started off very auspiciously.

NORTH CAROLINA.

By TAIT BUTLER, *Raleigh.*

New work.—The only new work inaugurated in North Carolina during the past year was the holding of women's institutes in connection with the regular farmers' institutes.

Owing to our social ideas and customs there is probably no place which has been less influenced by modern discovery and the recent advance in scientific knowledge than has the southern home, and it is therefore not surprising that these institutes for the benefit of the farmers' wives and daughters have received little attention in the South.

Many obstacles and much discouraging indifference were expected and met with in starting this work, but on the whole the results were not entirely unsatisfactory. Anyone who has visited the rural home knows that much improvement is needed, and quite within reach with the facilities already existing or easily obtainable.

No one any longer questions the good done by the farmers' institutes for the men on the farms, and knowing that there is just as much need for and as great opportunities for improvement in the conditions existing in the farm homes of the State, no further reason need be given for the inauguration of this work. The spirit of conservatism that looked upon these women's institutes as too great an innovation, nor yet the indifference of many of the women on the farms, was the chief difficulty in the way of holding successful meetings. The great obstacle to success with these institutes, as with those for men, is the difficulty in finding suitable lecturers. Southern women are not much given to talking in public, even exclusively to their own sex, and have given still less attention to a scientific study of domestic science.

From July 14 to August 11 twenty-one of these women's institutes were held. The average attendance was 83, which, considering the circumstances, is not by any means discouraging. At several of these institutes the attendance was extremely small, but those present usually became interested, and the prospects are bright for good meetings in practically all these localities next year.

NORTH DAKOTA.

By E. E. KAUFMAN, *Fargo*.

Last year the Great Northern Railroad furnished a train, which we equipped with specimens of seeds and a force of lecturers, and sent it out over the State. We made from seven to twelve stops each day, averaging about three-quarters of an hour at each stop, except that in the evening we held sessions from 6 or 6.30 o'clock to 9.30, and then ran 40 or 50 miles, perhaps, to spend the night at the next place of meeting.

The trip was very successful, the trains enabling us to reach a larger number of people than could have been met at the same time by our regular institutes. We usually confined our lectures to one subject, and where the crowds were too large to be accommodated in the car we adjourned to the waiting room of the station or to some near-by hall. We had four speakers; two would deliver addresses at one station and the other two at the next, and so alternating during the day.

We do not consider the work done by the train service as complete as that of our regular institutes, its chief advantage being, as I have stated, in enabling us to reach a large number of people in a short time.

In addition to our lectures, we have prepared special circulars giving a short résumé of the subjects, and we distribute these through the audience.

President J. L. Worst, of North Dakota: I desire to say that the most good to the people in running these special trains comes in cases of emergency. When the scourge of rust struck the country a few years ago, the farmers would bring in seeds that were contaminated; we would examine them on the car and tell them the remedy and prescribe the proper treatment. North Dakota grows about 54 per cent of the flax of the United States. We would show the farmers how to treat the seed to prevent its rusting, and in this way I believe we did a great deal of good. We ran our train just before seeding time, and by this means left an impression that was greater than could have been made at any other time. Every bushel of flaxseed should be thoroughly treated with formaldehyde before it goes into the ground, and you can impress this on the farmers so that they will practice it if you can get at them at seeding time. I believe the seed train is a very important thing in cases of emergency.

OHIO.

By T. L. CALVERT, *Columbus*.

The only change we have to note comes through an amendment to the institute law, which was passed by the general assembly of Ohio during the session of 1906.

Two hundred and ninety-six institutes will be held under the auspices of the Ohio State Board of Agriculture during the season of 1906-7, but under the management referred to a maximum of 352 are provided for.

OKLAHOMA.

By C. A. McNABB.

The institute work, as it is being carried out this season, is being operated much on the same lines as the past year, going more into detail on the practical side of farming operations, fully expounding the doctrine of seed selection and crop diversification. In addition, the stereopticon is being made a feature of each night session to illustrate practical lectures. The improvement of rural schools and school buildings, illustrated by the stereopticon, is also a new feature.

Heretofore the interest in the farmers' institute throughout the Territory has been lagging, and to stimulate a greater interest, to get the farmers to assume more responsibility in the conduct of institutes, to get them to thinking for themselves, we are adopting the plan of having special sessions at intervals of about two a month or one every month, and an especial committee appointed to arrange programmes and subjects for discussion at each meeting, corresponding with the office of the secretary for suggestions, copies of bulletins and periodicals that we have on file or can procure, and are advising that they take up one special subject for discussion at that meeting and consider it as thoroughly as is possible. They will then be prepared to take a great deal of interest in their annual sessions and will appreciate what the State is doing when foreign speakers are furnished them. Better facilities for carrying on institute work in Oklahoma, of course, we hope to obtain at the next session of our legislature.

ONTARIO.

By GEORGE A. PUTNAM, *Toronto*.

We hold annual picnics in connection with the annual meeting of the farmers' clubs. In holding these picnics, we also arrange for some special line of institute work, but they are not in the nature of a regular institute meeting. We also have printed for distribution a circular setting forth our work, and we get requests for our literature, and in that way more farmers get the benefit of our work. We have a membership in our farmers' association of 21,052. In connection with the farmers' institutes, we have 55 men speakers. The amount of departmental funds expended was \$16,833.75. In addition to that we expended \$12,459.03 funds raised by the institutes. This makes a total expended of \$29,292.78. Our women's institutes are growing very rapidly in Ontario, and I have therefore taken the liberty of reporting them separately. The number of meetings was 2,102, and sessions 2,590. I should explain that many of our women's institutes held monthly sessions, and those are counted in this. That is, all those sessions where they took up a regular programme. There were 12 special institutes held. The aggregate attendance was 50,060 at the regular institutes and 1,800 at the special institutes.

We have some of the most successful women's institutes in small towns, and some of these are composed largely of town members. One important phase of this work is that it brings the town people and the country people together. The number of membership in the women's institutes is 10,404. The number of speakers employed, women, was 27. The amount of money expended, departmental fund, was \$8,200, and \$2,976.64 raised by institutes, a total of \$11,176.64.

We have a regular officer appointed to organize the institutes, and we ask this officer to get the membership of those institutes. Although it is not the case that all those are members who come to the institutes, they usually become members. We have a membership fee of 25 cents. This entitles the member to all the institute reports published by the department each year. Those names are all sent in and we keep them on file, and when we get hold of anything that we think of particular importance we send it to the members. The same is true with reference to the farmers' institutes. We believe that that particular feature of the work has the effect of increasing the interest. That is in both institutes. We have a little pin, a sample of which I am wearing here, which each member can get by paying 15 cents, and when they have a convention they wear these pins and in that way they consider themselves introduced. It seems to have a good effect to have a small membership fee for the institutes, and this is used for disseminating literature to the members.

OREGON.

By JAMES WITHYCOMBE, *Corvallis*.

The interest in farmers' institutes in this State is steadily growing, the meetings are more largely attended than in the past, and the discussions are more lively.

Very few if any new features have been introduced. The principal change is the shortening of the addresses of the speakers and more time devoted to a general discussion of the subjects presented. In this way we find that the farmer receives a greater benefit, as phases of the subject are brought out in which he is specially interested. We have also encouraged the exhibition of products in connection with institutes; for instance, in districts where new forage plants are introduced we have some of these shown, so that they are practical object lessons of what it is possible to do in that particular locality. In horticultural districts we have also had good success with model trees, showing how they should be pruned, trained, etc. For the evening session we use the stereopticon quite freely to illustrate types and brands of live stock. This is very interesting, especially to dairymen, as it enables the speaker to point out plainly the difference in the types of dairy animals.

The effect of the institute work is quite marked, the farming practices having greatly improved thereby. This improvement in agricultural conditions, resulting from the institute work, is the cause of the marked interest taken by farmers in this class of agricultural education.

PENNSYLVANIA.

By A. L. MARTIN, *Harrisburg*.

During the past year meetings were held for carrying on new work, one in the line of a dairy school at Troy, Pa., at which the actual process of testing the milk for butter fat was carried out, ripening the cream for churning and full process of churning, scoring the butter, etc. A herd of dairy cows was visited and the herd passed upon by an expert as to the butter points. Patrons of the creamery formed the class. This, our first meeting of the kind, promises good results for the future.

We are also testing the soils as to their adaptability for the various crops grown within the State, including apples, alfalfa, and certain lines of market gardening.

We hope in the near future to be able to report that actual demonstrations have been carried out by every county within the State.

QUEBEC.

By O. E. DELAIRE, *Quebec*.

In our farmers' institute work in the Province of Quebec we have endeavored to classify the subjects that we desire to present in our institutes.

Under the head of feeding of the milch cow we discuss: (a) Green fodders for summer and fall; (b) Winter feeding in view of milk production; (c) Composition of rations, and (d) care and management.

The breeding of the bacon pig is presented under (a) Present state of this industry in the Province of Quebec; (b) Requirements of the market; (c) Desirable types; (d) Summer breeding; (e) Winter breeding, and (f) Care of the breeding stock.

Agricultural instruction in the rural schools is presented under: (a) Practical horticulture in the garden and (b) Experiments on physics and chemistry.

Fodder plants and herbs: (a) Clover in agriculture; (b) Indian-corn culture; (c) Rape culture, and (d) Root culture.

Cultivation of the soil: (a) Rotations; (b) Tilling of the soil; (c) Drainage; (d) Barnyard manure and commercial fertilizers, and (e) Green manure.

Improvement of live stock: (a) Individual records; (b) Selection, and (c) Associations for the controlling of the production of milch cows.

Bee culture on the farm: (a) Revenue of the beehive without swarming; (b) Revenue of the beehive with one swarming, and (c) Revenue of the beehive with two or three swarmings.

Poultry breeding: (a) In view of the production of eggs; (b) In view of the production of meat, and (c) In view of the production of chickens for export.

Fruit and forest trees.

Gardening.

Our lecture force is selected with a view to having these topics discussed by men who are experienced in these several directions. The classification has assisted us in organizing our work in a more methodical way, and enables us to direct our teaching force in such a way as will meet the special needs of different localities.

RHODE ISLAND.

By JOHN J. DUNN, *Providence.*

(See statistical table.)

SASKATCHEWAN.

By JAMES MURRAY, *Regina, Canada.*

Report on new work.—The farmers' institute work of this Province is part of that carried out by the agricultural societies, of which we have at present 43. The department usually supplies speakers for one or two meetings under each society, pays their salaries and expenses, and also attends to the advertising of the meetings, both in newspapers and by posters. A grant of \$10 for each of two other meetings is paid by the department should the societies hold these and provide their own speakers. In districts where no agricultural societies have been organized, institute meetings are arranged for directly by the department.

As Saskatchewan is primarily a grain-growing Province our energies in promoting institute work have been mainly along lines that would enable our farmers to grow more grain of better quality. We do this in several ways:

(1) By holding the seed-grain fairs and institute meetings jointly. At our seed fairs prizes are offered for wheat, oats, barley, and other seeds. A thoroughly qualified judge is supplied, who leaves a score card in each sample, and after the awards have all been made he explains fully the points of superiority of the prize-winning samples, what qualities are wanted in seed grain, how to prevent smut, etc. Each sample of grain shown for a prize represents from 50 to 10,000 bushels offered for sale. The meetings of this class held last year were our most successful institute meetings.

(2) By running a special seed train during the winter, stopping at stations every 10 miles and discussing the need for good seed, smut treatment, etc.

(3) By holding round-up meeting of farmers at the Government experiment farms at a season of the year when the crops are ripened and most can be gained from a few lectures illustrated by the growing crops.

(4) We aim to have at least one man on each delegation sent out, no matter at what season of the year, well informed on such matters as smut treatment, summer fallowing, and seed selection.

Some sections of Saskatchewan are principally adapted to stock raising, and as stock do well in all parts we have held over 50 live-stock judging schools during the past year. Live animals are taken into the lecture room and used as illustrations by the demonstrator. These meetings are held during the forenoon and afternoon, and regular institute meetings at night. A splendid interest has been taken in this class of meetings, which are found very useful in illustrating animal form.

UTAH.

By P. A. YODER, *Logan.*

A feature of our farmers' institutes in which we diverge somewhat from the work of former years is in the plan of organization. A special effort is being made to organize the farmers into institutes or clubs. The general plan is to organize each community into an institute, and then to effect a county organization in which the local organizations are integral units. Ultimately we aim to form a State organization in which the county organizations, and through them the local organizations, are represented. The presidents of the local organizations are vice-presidents of the county organizations, and from their

number a president of the county organization is chosen. There is no attempt made while effecting these organizations to have them adopt a uniform purpose for the organization nor uniform times of meeting. While all adopt as general purposes the advancement of agricultural interest and dissemination of information, some include mercantile and protective features, while others do not include these. Some prefer to meet at regular times, and others leave it to the call of the officers of the organization. It is the aim of the committee to send speakers to one or more meetings of the county organizations each year, and to as many more of the local organizations as possible. The responsibility for advertising meetings and for arranging the details of the programmes is left with the officers of these county and local organizations.

In another respect the work of this last year differed from that of the year immediately preceding, viz, the assignments to go on the farmers' institute tours were more uniformly distributed among a larger number of members of the agricultural college faculty. Thus a diversity of farming interests was recognized in the assignment of speakers. The individual sessions, however, were planned with due regard to unity of interest in the session held in the same locality.

VIRGINIA.

By A. M. SOULE, *Blacksburg.*

The conduct of farmers' institutes in Virginia is in charge of the individual members of the State board of agriculture, there being one member of this board from each Congressional district. The sum of \$500 is appropriated to each member of the board for institute purposes, and he advertises and arranges for meetings in his own district.

During the year a special seed train was sent out through a portion of the tobacco region of the State. It also passed through a portion of the Piedmont section, and through the Shenandoah Valley as well.

As a result of the institute work, corn exhibits have been made at some of the fall fairs. These exhibits were judged by members of the station staff, and it is encouraging to note that more attention is being given to the care and selection not only of seed corn but of tobacco and other crops.

The several normal schools for teachers held in various sections of the State during the summer were attended by members of the station staff and addresses delivered on teaching agriculture in the public schools. The teachers have evinced much interest in this important question, and a movement is on foot which promises to culminate in agricultural instruction being made a prominent part of the public school curriculum and given that prominence and consideration which its importance merits.

While this may not be classed directly as institute work, it is certainly an outgrowth of the institute movement.

The State farmers' institute organized three years ago held its third annual session in Roanoke on July 10, 11, and 12. The attendance this year approximated 1,200, more than 1,050 of the delegates visiting Blacksburg on a special train, provided through the courtesy of the Norfolk and Western Railway. The institute has now a membership of nearly 600, and 55 counties in the State are represented by county vice-presidents who are bona fide members of the institutes. An annual report of 240 pages is now in press and when completed will be distributed. This report will constitute an important contribution to the agricultural literature of the State. The director of the experiment station is secretary of the State farmers' institute.

No doubt a considerable number of independent institutes, picnics, and harvest home meetings were held at various points in the State during the year, but the writer has no means of obtaining accurate data with reference to when and where they were held or the number of farmers attending.

WASHINGTON.

By E. E. ELLIOTT, *Pullman.*

The legislature of the State of Washington of 1904 failed to make the usual appropriation of \$5,000 for the support of farmers' institutes. No provision has been made outside for the conduct of such meetings and the result has been the abandonment of the institute work of the ensuing biennial. A number

of the meetings, which would be classed under the head of independent institutes, have been conducted, but in nearly every instance at the expense of the locality where the meetings were held. It is anticipated that the next legislature will make ample appropriation for institute work, as an energetic movement is on foot agitating the subject.

WEST VIRGINIA.

By H. E. WILLIAMS, *Charleston.*

During the year ending June 30, 1906, no new work was attempted so far as I know, except one dairy school, lasting one week, held at Sinks Grove, Monroe County. In this case the board of agriculture appropriated the average amount of cost of holding institutes and the people made up the balance of expense.

WISCONSIN.

By GEO. MCKERROW, *Madison.*

Special report of new work.—The Wisconsin farmers' institutes for the season of 1905-6 did not inaugurate any new work, strictly speaking, but continued on their previous plan of developing and broadening out as much as possible on the different lines of farm work being followed by Wisconsin farmers, particularly in dairying, under such heads as breeding of dairy cows, developing dairy cows, cow feeding, sanitary stables, stable ventilation, milk testing, cooperative creameries, cheese making, etc.; horse breeding, feeding and developing horses for market, and topics relating to successful horse breeding; sheep husbandry in its different details under separate headings; swine breeding and feeding; poultry raising, including winter egg production and rearing of broilers; turkey raising, etc. Farmers' gardens, small fruits, orchards, and other horticultural topics; various farm crops, such as corn, small grains, clovers, alfalfa, mixed pastures, and meadows, permanent pastures, sugar beets, roots for stock, rape and other supplementary crops, destruction of noxious weeds; homes and home surroundings; cooking in the farm home and other phases of domestic economy, with many other topics, have been treated at the Wisconsin institutes the past season.

WYOMING.

By B. C. BUFFUM, *Laramie.*

(See statistical table.)

REPORT OF THE FARMERS' INSTITUTE SPECIALIST OF THE UNITED STATES DEPARTMENT OF AGRICULTURE.

By JOHN HAMILTON, *Washington, D. C.*

Total number of sessions of institutes held in 41 States and Territories reporting, 10,513.

Total attendance at regular institutes in 40 States and Territories reporting, 1,233,553.

Attendance at special institute meetings in 25 States and Territories reporting, 103,360.

Attendance upon railroad specials in 9 States and Territories reporting, 188,263.

Total attendance, as above, 1,525,176.

Appropriation to institutes, 40 States and Territories reporting, \$251,426.32.

Cost of institutes in 41 States and Territories reporting, \$241,947.41.

The average cost of the institute per session in 41 States and Territories reporting, \$23.42.

No institutes were held in Alaska, Florida, Nevada, New Mexico, and Washington.

The meeting adjourned until 8 o'clock p. m.

EVENING SESSION, MONDAY, NOVEMBER 12, 1906.

The convention was called to order at 8 o'clock p. m. by President Creelman.

REPORT OF TREASURER.

The treasurer, John Hamilton, read his report, showing a balance in his hands October 31, 1906, of \$165.85. The report was referred to the auditing committee. (For full report and report of auditing committee, see page 84.)

L. R. Taft, of Michigan, presented the following report:

REPORT OF STANDING COMMITTEE ON INSTITUTE ORGANIZATION AND METHODS.

The great diversity of conditions in the different States makes anything like uniformity in the way of organization for the holding of farmers' institutes impossible, and, to some extent, undesirable. It appears to your committee, however, that, so far as possible, there should be not only a State organization to lay out and supervise the work, but also county, township, and similar local organizations, to have immediate charge of the arrangements for the meetings, and that these should be of a permanent nature, with a constitution, by-laws, and rules for carrying out the institute work. When this stage of progress has been reached it furnishes to the local officers a guide for the performance of the duties of their position.

Present and previous arrangements will, to a large degree, determine whether the work will be carried on by the State board of agriculture, by the commissioner of agriculture, by boards of institute managers, or by the agricultural college and experiment station, but that there should be some central organization, to have the matter of holding institutes in charge, will not only insure economy of administration, but greater efficiency, seems self-evident. In many States there are societies that represent special interests, such as dairying, fruit growing, sheep breeding, etc., and it would seldom seem advisable to in any way interfere with the regular meetings of such associations; but there should be hearty cooperation, even to the extent of holding joint meetings, and it will be found that the State is sufficiently large to hold the society meetings without interfering with the work of the institutes, provided the dates, places, and topics for the meetings are materially considered in making out the programmes.

The maintenance of local organizations with regular members, each of whom pays a small fee, also seems to increase the interest in the work, particularly if they can be made to feel that it is "their institute." On the other hand, while the local officers should be consulted regarding topics, dates, and places, the actual selection and assignment of speakers, and the grouping of meetings, which to a certain extent will fix the time and place for the meetings, should remain with the State director or superintendent of institutes.

To this end we again commend the general scheme for an institute system prepared by our secretary, Mr. Hamilton, which was printed in the last report of the association.

In the way of institute methods, we would suggest increased attention to the use of apparatus and demonstration. This would apply not only to the means of doing things, but to the methods employed.

One of the difficulties experienced in most States is the securing of speakers properly qualified to instruct the average farmer audience. Even though they are graduates of the agricultural college, if they have been at work for five or ten years on the farm, it will be unusual if they have kept informed regarding the progress that has been made in agricultural science, while in many cases the farmer speaker who attempts to explain the principles upon which certain practices are based will make mistakes as ludicrous as they are absurd. To aid in overcoming this difficulty, a normal institute for institute lecturers, to be held just before the institute season opens, is suggested. Four or five days can be spent at the agricultural college, with lectures by members of the faculty upon the recent discoveries in the sciences that underlie agriculture. This will also give the lecturers opportunity to present outlines of their addresses for criticism by their fellow-workers. While there are other matters of vital importance, it seems to your committee that the institute road will

have many of its rough spots smoothed if more attention is paid to thorough organization and to the better preparation and equipment of institute lecturers.

L. R. TAFT,
S. E. KAUFMAN,
G. A. PUTNAM,
Committee.

G. A. Putnam, of Ontario, read the following report, prepared by Miss Blanche R. Maddock, of Ontario:

REPORT OF STANDING COMMITTEE ON WOMEN'S INSTITUTES.

Your committee, in presenting the following report, desire to call your attention to the fact that this is the first report on women's institute or auxiliary work prepared for the association. It is therefore incomplete. The women's department of the farmers' institute is just beginning to make itself felt. That there is need for special work among the women of the rural districts of our land is conceded by almost every superintendent of farmers' institutes in America, but all are not clear as to the best method of supplying that need. It may not be feasible in all States to establish distinctive organizations for women until the interest of the women has been aroused by their attending the meetings of the farmers' institutes; but your committee would like to emphasize the fact that where organizations have been formed the interest in the work done by these organizations has increased year by year. We believe the very existence of these societies will create an interest in women's work. The purpose of this report is to show the efforts that have been made under the farmers' institute for the bettering of the conditions of women in the rural districts and to give some idea of the work accomplished by the different societies. Allow me to add that these organizations as evidenced by the reports from the several States and provinces are here to stay and are just waiting for further support from the officers of the farmers' institutes and from the legislatures to expand into the most influential and far-reaching societies in America. This is undoubtedly true, for the one purpose of their existence is the elevating and uplifting of the home, which is the keystone of our American nation—the center of influence that molds the character of the State.

Your committee submits herewith the reports received from the States and Provinces. No reports were sent in from Alberta, Florida, Georgia, Idaho, Iowa, New Brunswick, New Hampshire, North Dakota, or Prince Edward Island.

STATE AND PROVINCIAL REPORTS ON WOMEN'S INSTITUTES.

Alabama.—No separate session held. No special women's work done. Dr. C. A. Cary said in reply to questions sent him that some form of women's institutes would be beneficial.

British Columbia.—No special women's institutes have been formed in British Columbia, but lady speakers have attended the men's meetings and discussed subjects of interest to women. As the population is composed of men and women of all nationalities and languages, the chief need of this Province is to show the people the need of making life on the farm brighter and easier for the women.

California.—No separate sessions have been held for women, but interest in women's work is being awakened by lady speakers sent to the farmers' institute meetings. Last year 1,200 women attended the men's meetings. The assistant superintendent of university extension work, Mr. W. T. Clark, believes that the great need is to convince the women of their State that practical help could come through the medium of the farmers' institute meetings. There is also a need of convincing the women that more up-to-date methods of housekeeping are necessary. So far, the great majority of the women of California do not seem to see the need of more advanced methods of housekeeping.

Colorado.—Reports no advanced work along women's lines, but the superintendent believes the women are becoming interested in the subject of domestic science and are beginning to feel the need of more teaching along these lines.

Connecticut.—In Connecticut no separate sessions were held for women during the past year, but large numbers of women attended the men's meetings, at

some of which women read papers on topics bearing particularly on the home, dietetics, and home sanitation being favorite subjects for discussion.

Delaware.—No special meetings under the farmers' institute have been held for women. In rural districts the grange is doing good work, both for men and women; at their meetings all topics of interest to the home maker are discussed. The superintendent, Mr. Wesley Webb, thinks there is great need for some such organization as the Women's Institute of Ontario or the Illinois Association of Domestic Science, and he hopes at the next session to obtain a grant of money from the legislature for the purpose of organization.

Illinois.—Probably more women's work has been done under the farmers' institute in Illinois than in any other State. The Illinois Association of Domestic Science is affiliated with the farmers' institute and is doing for women what the farmers' institute is doing for men. As a separate report of this association is to be given, your committee would suggest that it be appended and printed with this report.

Indiana.—In Indiana women's auxiliaries of the farmers' institutes have been formed. The constitution calls for the regular county officers, with a vice-president in each township of the county where an auxiliary is formed. An annual business meeting must be held by each auxiliary and as many other meetings as can be arranged by the executive. Last year about thirty women's sessions were held. Between \$1,000 and \$1,500 was spent in the interest of farmers' wives of the State. During the past year at the meetings of the auxiliaries, subjects such as household management, education of children, and home literature were discussed. Last year 25,000 women attended the meetings of the farmers' institutes and women's auxiliaries.

Kansas.—The State board of agriculture are becoming very much alive to the need of women's organizations for the study of domestic economy. One women's institute had been formed before May 1, and it was expected that Mrs. Henrietta W. Calvin, instructor of domestic science, would visit forty institutes for the purpose of forming women's auxiliaries. In many institutes one afternoon is given up to topics of interest to women.

Kentucky.—No separate sessions have been held, but usually there are as many women at the meetings as men. Women display great interest, and it is believed that some association for women in connection with the farmers' institute would be much appreciated. The superintendent, Mr. H. Vreeland, believes that the great need of women in rural districts is to inspire them with more faith, especially as to the value of farming as a profession.

Louisiana.—Comparatively little interest has been shown by the women of this State. No separate sessions have been held. The secretary of agriculture, Mr. Charles Schuler, believes the great need of the State is more missionary work along the lines of domestic science and the care for and love of home.

Maine.—No advanced work has been inaugurated during the past year. Forty-one meetings, at which both men and women were present, were held during the year. At some of these women read papers on different branches of domestic science.

Manitoba.—No women's institutes have been organized in this Province, but the women are always invited to attend the men's meetings, and in many cases it is they who in their eagerness to attend themselves persuade the men to go, too.

The very fact of the loneliness of the lives of women in the homes of our prairie provinces, and also in the prairie States, is sufficient proof of the need of ladies on the different delegations, or corps of workers, so that they may come in personal contact with these brave pioneer women, in order to give them fresh inspiration and courage as well as practical help in the management of their homes.

Maryland, Mississippi, Missouri, and Montana.—These States have done practically nothing up to the present time in interesting the women of their separate States in home economics. All the superintendents are very much interested in the women's movement and see the necessity for missionary work along the lines of home economics.

Massachusetts.—A large number of women attend the men's meetings; in fact, at many meetings the women outnumber the men. In this State women are so interested in the general farm subjects that it has not been considered necessary to introduce home economic topics.

Michigan.—There is in the Michigan constitution of the farmers' institute a provision for a women's session in each electoral district. At these women's sessions of the farmers' institutes lady speakers address the meetings on all

subjects of interest to women. Miss Jennie Buel, who has charge of this work, tries to have at least one address on what she terms "a live topic"—that is, one that will enthuse and inspire rather than convey technical knowledge—a personal heart-to-heart talk that will show the renewing effect of mental activity. The women's departments all through the State of Michigan are well organized and are, with the cooperation of the Grange, doing a grand work. Five hundred dollars was spent for women's work last year. There was an attendance of about 30,000 women at the special sessions and farmers' institute meetings.

Minnesota.—The superintendent, Mr. O. C. Gregg, was one of the first to see the need for improved conditions for the women of rural districts. Through his efforts women's institutes have been organized. Last year 800 copies of the Farmers' Institute Annual were sent to the members of the women's institutes. This annual contained a department for women, in which a course of study was outlined for the members of the institutes.

Nebraska.—During the past year very decided advance has been made. Organizations known as the Women's Department of Organized Agriculture have been formed all through the State. In many of these associations the traveling-library system has been introduced. The executive are now formulating a plan of systematic study for the State associations.

Nevada.—On account of the sparsely settled districts it is impossible at the present time to carry on anything like systematic work among women in the rural districts.

New Jersey.—The women of New Jersey attend the men's meetings and take part in the programme. As a rule, they prefer holding meetings with the men and listening to general farm topics. They are not yet alive to the need of home economic teaching.

New York.—There were 20 separate sessions held for women last year, but generally speaking the ladies prefer a mixed meeting. At each of the 312 meetings held a lady speaker was present. There was an attendance of about 30,000 women at the meetings last year.

North Carolina.—Twenty-one women's institutes have been held with a total of 39 sessions, the average attendance being 83. A lady superintendent has also been appointed.

Nova Scotia.—In Nova Scotia and the maritime provinces, the traveling dairies are doing a grand work. The superintendent, Professor Cumming, of the agricultural college, is introducing the work of the women's institutes through the lady speakers who accompany the traveling dairy. They hold meetings in the different farm homes or in public halls, and there address the women on improved methods of housekeeping and home making, as well as on dairy subjects.

Ohio.—While very little women's work has been done in this State, yet through the lady superintendent of the Grange, Miss Mary E. Lee (my co-worker on this committee), the different branches of home economics have been thoroughly dealt with by the Grange. Most effective work has been done in the past year, and plans for work have been submitted to the different associations that will, I believe, prove of inestimable value during the coming year.

Ontario.—Last year there were 1,350 women's sessions held, with an attendance of 58,000 women. The membership up to June 1, 1906, was 10,730. In Ontario, all women who are interested in the home and housekeeping are eligible to become members by paying an annual fee of 25 cents. The meetings are held once a month, either at the homes of the members or in a hall selected for the purpose. At the local meetings the members are responsible for the programmes, which are usually arranged six months or a year ahead, with the name of the speaker for each subject given. There were about 300 meetings held during May and June of this year, at each of which two lady delegates, sent out by the superintendent of farmers' institutes, were present to give demonstrations or lectures upon home economics. In December, there is always held at Macdonald Institute, Guelph, a women's institute convention or round-up, to which delegates from every institute are sent. In this way the women from the north, south, east, and west of our province meet and receive inspiration and encouragement from each other. Last year \$6,500 was voted by the department of agriculture for women's institute work.

Oregon.—Sometimes separate sessions are held, but generally the women attend the men's meetings. They very often prepare papers for the meetings and are usually ready to take part in the general discussions. It is felt that

more domestic science teaching is needed. The great needs of the State are: Better social advantages in rural districts and more teaching along esthetic lines of domestic science.

Quebec.—For many years the women of Quebec have attended the men's meetings of the farmers' institutes and have taken about as much interest in the topics discussed as the men, but no attempt at separate organizations has been made up to the present time.

South Carolina.—Reports that no separate sessions have been held, but women have attended the men's meetings. Last year 600 women attended the meetings of the farmers' institutes in the State. The subjects the women of South Carolina are most interested in are: Beautifying the home, cultivation of flowers, home sanitation, canning of fruit, and kindred topics.

South Dakota.—Last year 25 separate sessions were held for women, with an average attendance of 45. Separate sessions are preferred, but the women are usually willing to attend and take part in the men's meetings. The chief needs of the rural districts of the State are: A better understanding of the preparation and chemistry of foods, and more information as to how work can be systematized, in order to allow more time for rest, reading, and self-culture.

Saskatchewan.—During the past year great interest has been shown by the women of this province in the farmers' institute meetings, to which they were invited. The superintendent, Mr. George Harcourt, believes that in the near future women's institutes could be organized to good advantage.

Tennessee.—Your committee would like to draw the attention of the convention specially to the report of this State. Tennessee has a dean of women in connection with the State University. This lady, Miss Anna Gilchrist, is endeavoring to unite all women's clubs, home economics clubs, housekeepers' clubs, and others into a federated association in connection with the farmers' institute. At the annual round-ups in the different parts of the State passes on the railroads were given to men only. This year these passes were also given to women, so that they are now taking a decided interest in the meetings. The great need of the State is for more training in plain cooking and the teaching of hygienic methods of living. Also, more money is needed for the women's department, in order to supply good literature to the women of the State.

Texas.—No women's institute work has been done in this State, but at the annual meeting of the Women's Industrial Association domestic science and other subjects of special interest to women are discussed.

Utah.—Six special sessions for women were held during the year. Articles on home economics subjects were printed in the farmers' institute report. About 1,000 women attended the usual farmers' institute meetings. An increased interest is shown year by year by the women of the State.

Virginia.—No work for women has been done in this State, but the superintendent, G. W. Kolner, thinks that some such organization as the Illinois Association of Domestic Science or the Ontario system of women's institutes would work very satisfactorily in Virginia.

West Virginia.—Proposes taking up the work of women's institutes this coming winter. It is thought that the women are more willing to take part in the men's meetings than are the men themselves, but very little chance has been given them to talk up to the present time. About one-half of the total attendance at the farmers' institute meetings during the past year were women.

Wyoming.—No work for women has been attempted in this State.

MISS R. BLANCHE MADDOCK,
MISS MARY E. LEE,

Committee.

Mrs. I. S. Raymond, president Illinois Association of Domestic Science, read a paper on—

WHAT THE ILLINOIS ASSOCIATION OF DOMESTIC SCIENCE STANDS FOR: ITS OBJECTS AND ITS WORK.

The association stands for—

- (1) The stimulation of interest in all that pertains to homemaking.
- (2) The encouragement of a domestic science organization in each county of Illinois, the same to be affiliated with the county farmers' institute.
- (3) The creation of local organizations in every town and hamlet of Illinois, and for the coordination of the work of such associations and their affiliation with the county organization.
- (4) The introduction of the study of domestic science into our public schools.

Some results of the work of the Illinois Association of Domestic Science.—

(1) The establishment of department of household science at the University of Illinois.

(2) The housekeepers' conference of two weeks held for the past three years at the University of Illinois.

(3) The establishment of scholarships in household science in the State university.

(4) The erection of a woman's building on the State fair grounds, and holding a two weeks' school there each fall, to which the county domestic science associations recommend persons for scholarships.

(5) The two weeks' course for girls at the University of Illinois given as a premium for skill in bread judging.

(6) The equipping of the Illinois Association of Domestic Science Library—117 volumes and about 30 Government bulletins.

We have organizations in 55 counties, 50 of which are affiliated with the regular county farmers' institutes. The following is a list of counties having auxiliary clubs: Bureau County has 7, Champaign 8, Christian 1, Clay 5, Douglass 2, Edwards 3, Grundy 3, Kane 2, Livingston 3, McHenry 3, Macoupin 6, Sangamon 1, Schuyler 3, Wabash 1, and Whiteside 1.

The county clubs meet once or twice a year. The local clubs once or twice a month. All of the expenses of the county meetings are paid by the county farmers' institutes. Special meetings are held, such as picnics, banquets, etc., where the counties are organized into local clubs.

Attendance.—In counties that are well organized the sessions are crowded. Number of sessions held, 60; aggregate attendance not counted, but good; number of speakers employed, 42; amount of money expended, \$650 approximately.

New work inaugurated and carried out.—The new work was a plan for conducting girls' bread-making contests. Some work was successfully done in this line.

Old methods developed during the past year.—The usual methods of carrying on farmers' institute work and recommending persons for scholarships in the department of household science at the University of Illinois, also recommending girls for the State fair school of domestic science.

The work of caring for the circulating library and sending out books was a part of the duty of the secretary of the Illinois Association of Domestic Science.

We held conferences among the leaders of the work, at which there are recommended for scholarships girls who are fitted to take the work at the university. Often there is a bright girl in a country school, or an earnest young woman who is not able to meet the expense of a course in the State university. The Domestic Science Association recommends such girls for this scholarship, and if they pass the examination they are admitted. Of course, the most of them have to take work in the academic or preparatory school in order to fit them for the work proper. We don't expect to send very young girls, but only those who have had opportunity for preparation before they go there.

Through the help of the experiment station we were granted the woman's building at the State fair grounds. We have organized there a school in domestic science, and the girls that we send to this school come back to our farmers' institutes and lecture and give demonstrations on how to cook and take care of a house, for in the school they are required to prepare their own meals and to take care of their own homes.

We are going to establish a two weeks' course in the University of Illinois, to be given as a premium for skill in bread judging, and we have our library, which the secretary has charge of and sends out to the different county associations.

In the majority of counties in Illinois women have a part on the programme of the farmers' institute.

In some counties, at the request of the farmers' institute officers, they conduct entirely one or more sessions.

The women of Illinois are working together for better organization to aid in better home making.

They are also working to have instruction in household science taught in the public schools.

They appreciate the kindness and generosity of the farmers' institute in soliciting their assistance and giving to them hearty encouragement and financial support.

Tait Butler, of North Carolina, read the following report:

REPORT OF STANDING COMMITTEE ON INSTITUTE LECTURERS.

Your committee on institute lecturers begs to submit the following as its report. At previous meetings of this association considerable time has been devoted to the reading of papers and discussions on the subject of institute lecturers. The essential characteristics or qualifications of the ideal institute lecturer have been a prominent feature of those discussions of the ideal institute differed as ideals differed, but the discussions have probably served to raise the standard of quality in the ideal lecturer and thereby a good purpose has been served.

In the opinion of your committee the most important problem confronting the farmers' institute managers of America to-day, as affecting the future development and success of the work, is the securing and maintaining of a sufficient number of effective institute lecturers.

The development or evolution of such a work or such an institution as the farmers' institute is likely to be that at first there may be a single special and definite purpose and field of operations. As the work grows new ideas come, new lines of work are developed, and the scope of operations is broadened until the institute has little in common with the object of the primary movement. At this period, which is probably the present state of development of the farmers' institute work in America danger lies in too great expansion and the dissipation of energies over too large a field.

What, then, are the purposes, aims, and limitations of the farmers' institute work? It is necessary that we define the final and proper field of the farmers' institute work, and outgrow the present more or less chaotic and formative period, before intelligent and effective efforts can be made to supply or educate institute lecturers.

The purposes and scope of the farmers' institute work must be determined before intelligent recommendations can be made regarding ways and means of supplying suitable institute lecturers. These must be defined before we can know what sort of institute lecturers we need, or formulate and execute plans for securing and maintaining them.

In the opinion of your committee the work of the farmers' institute is educational; to carry agricultural education to those on the farms who have lived beyond the usual school or college age. Farmers' institute work is in no sense university extension any more than is an agricultural college a university. It is on this view of the purpose and scope of the farmers' institute that this report is based.

If the most important factor in successful farmers' institute work is the man—the institute lecturer—then three important questions at once present themselves.

First, what is the present and prospective source of supply of institute lecturers; second, is the supply sufficient and satisfactory, and, third, if it is not sufficient or satisfactory, what can be done to overcome the difficulty?

To obtain light on these points the chairman of your committee sent a circular letter, accompanied by five questions, to institute directors and others interested in the work in the different States and provinces.

The questions are as follows:

(1) From what source are your institute lecturers drawn? State number or proportion from each source.

(2) What class of lecturer is most popular and effective?

(3) How many regular paid lecturers have you on your staff, and what is the average number of lectures or addresses delivered by each?

(4) Do you have any difficulty in securing a sufficient number of suitable institute lecturers?

(5) When the supply of suitable lecturers is insufficient, what suggestions have you to offer regarding a means of overcoming the difficulty?

Replies were received from 41 States, Territories, and provinces, 37 giving definite answers to question 1. Of these 37, 60 per cent, or 22, state that one-half or more of their institute work is done by the regular employees of the agricultural college, experiment station, and State department of agriculture.

These States are as follows: Alabama, Arizona, Arkansas, Colorado, Connecticut, Georgia, Idaho, Kansas, Michigan, Mississippi, Missouri, New Mexico, North Carolina, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, Wyoming, and two others not signed.

Those States and provinces reporting, wherein less than half the institute work is done by college and station workers, are as follows: California, Illinois,

Indiana, Kentucky, Maine, Massachusetts, Minnesota, Nebraska, New Jersey, Pennsylvania, South Dakota, West Virginia, Wisconsin, Ontario, and one not signed.

The answers to question 2 indicate plainly that it is the man—what he says and how he says it—that determines his popularity and effectiveness, and not what he does when not employed in institute work. The third question was intended to bring out data regarding the amount of work done, on an average, by each institute lecturer, but was not fruitful in bringing much definite information.

The answers to question 4 were somewhat surprising. Only 35 out of 41 gave definite answers to this question, and of these 35 only 15 had experienced any difficulty in securing a "sufficient number of suitable institute lecturers." The eighteen States where there is a sufficient supply of satisfactory lecturers are given for the information of those who have experienced difficulty in this respect:

Arizona, Arkansas, Colorado, Connecticut, Delaware, Georgia, Illinois, Indiana, Kentucky, Maine, Massachusetts, New Jersey, New Mexico, South Carolina, Utah, Virginia, Washington, Wyoming.

There were 2 others not signed and 6 that gave rather indefinite answers, indicating that they experienced no real difficulty in obtaining a satisfactory number of lecturers. It would be interesting to know the aims and purposes of the institutes as conducted in those States where extensive work is being done, but where an ample supply of suitable lecturers is reported.

The answers to question 4 showed plainly that while there was no scarcity in some States of institute lecturers capable of entertaining or supplying the "arousements," the number of satisfactory instructors in agricultural lines was in many States inadequate to supply the demand. In other States there was no scarcity because there was little demand—that is, little work was being done.

The answers to question 5 did not give that help in suggestions for means of overcoming the difficulty of a scarcity of effective institute lecturers which we hoped for.

There are two conditions which operate forcibly to render the problem of supplying and maintaining institute lecturers difficult to overcome. First, insufficient funds to adequately compensate lecturers, and, second, the short period of service required during each year. Conditions in most States seem to make it desirable to do the greater part of the work during one particular season of two or three months' duration. Under such conditions the man who is capable of doing satisfactory institute work can command employment in some other occupation for the entire year that will pay him as well or better.

We have been told that the director must be on the lookout for raw material to be developed. Where is this material to be trained? Is it to be by practice on institute audiences? A doubtful expedient, surely. The plan which some States are adopting of bringing their institute lecturers together for a week or longer for drill in their work is a good one, as a temporary expedient, at least. Will it be satisfactory in the end? Is the expense incurred justified by the short period of service which the lecturer secures during each year? Perhaps the plan has not been followed long enough for conclusive results to have been obtained.

The expedient of a special course of institute training for the students in agricultural colleges seems to me insufficient to meet demands, although it would help somewhat.

The suggestions of your secretary for interstate schools for the training of institute workers seems to be the best. Two, three, or more States where conditions are similar are combined to educate institute workers and interchange in their employment. This would be the cheapest and most effective method, but in the way of this and all other methods stand the two difficulties—short period of service and low compensation.

The education of institute lecturers will require more money. We must either pay them more and give them a longer period of service, so that they can and will educate themselves, or we must have more money so that we ourselves can educate them.

Is the training of institute lecturers for the different States an appropriate work for the Federal Government? If not, we see no other solution except the one of more money. Not from \$500 to \$20,000 for each State, but from \$20,000 to \$100,000 for each State. We shall probably have to work out this

problem slowly and prove that the money expended by the State in this manner yields large profits, and after that large appropriations may follow.

TAIT BUTLER.

C. C. JAMES,

E. J. WICKSON, *Committee.*

DISCUSSION BY C. C. JAMES, DEPUTY MINISTER OF AGRICULTURE, TORONTO, ONTARIO.

In an address which I delivered at the Ontario Agricultural College a few years ago, I strongly recommended the special training of students for institute work, and I am more convinced to-day than I was then of its necessity. The literary society of the college does not completely fill the requirements. I suggested that we ought to have a special course of lectures by members of the staff and expert institute workers, who would indicate to the students what subject would be most suitable for this work, how to prepare to address an institute on any subject, how to take up the subject with a view to interesting the audience, how to induce the audience to take part in the discussion, etc. Not only should these lectures be delivered, but the students should be trained—that is, an institute should be formed at the college, and the various students should be required to present subjects which would be taken up and discussed as in a regular institute, with an expert in charge to suggest and to criticise. These young men could be trained so that every one of them would pass out of the college with two or three subjects in shape to present at once to farmers' institutes. The success of such a course would depend to a large extent upon the qualifications and the ability of the professor in charge. With the right man, it could be made a success. I do not think it would be difficult to outline a series of lectures in this course at our own agricultural college that would be of immense benefit and would send out our graduates far better fitted to do institute work than they are at present.

Then there is another large class—the men who have not attended the agricultural college, or who, having attended, got no instruction along the line above indicated. What are we to do for them? In Ontario we have gathered our workers together at various times in connection with the Toronto Industrial Exhibition, or in connection with the winter fair at Guelph, where methods of work could be discussed and plans laid for institute work. This year our superintendent of institutes, Mr. G. A. Putnam, is planning a more extensive scheme of instruction. It is nothing less than the beginning of a normal course of training farmers' institute workers. Where this will lead or how far it will develop remains to be seen. It is a new line of work and has the hearty cooperation of the department and college, and we expect much benefit to result from it. If we had a special course for students in farmers' institute work, we could have the professors in charge take up this normal training of institute workers and extend it so that in a short time we could lay it down as a condition that institute instructors must have taken the special course provided and must have shown themselves capable of the work. We have a great many men who are in practical knowledge well qualified, but who need just such preliminary training as would be given in a course of this kind. There are others whose talking abilities are unlimited, but who would be curbed and restrained and whipped into proper shape by such a course.

We are finding it more and more difficult to get institute instructors who will satisfy the demands of the times. The reason is that our farmers are demanding better instruction. It is a favorable sign, of course. It means that agricultural work is being raised to a higher level, and we must follow the example of other lines of work and train men specially for instructors. Some people say that instructors are born, not made. Nevertheless, the supply of ready-made instructors is not sufficient for our requirements, and we must make plans to improve the supply if we would keep the agriculture of this country steadily improving.

F. H. Hall, of Illinois, read the following report:

REPORT OF STANDING COMMITTEE ON COOPERATION WITH OTHER EDUCATIONAL AGENCIES.

The "other educational agencies" referred to in this report are:

- (1) The United States Department of Agriculture.
- (2) The State experiment stations.
- (3) *The superintendents and teachers of schools.*

(4) The agricultural colleges.

The work of this committee was divided, the consideration of cooperation with the first two agencies, the United States Department of Agriculture and the State experiment stations, being assigned to Director W. C. Latta, of Indiana; cooperation with the superintendents and teachers of schools, to Director H. T. French, of Idaho, and cooperation with the colleges of agriculture, to Superintendent Frank H. Hall, of Illinois.

Director Latta sent out a list of eight questions bearing upon his part of the topic, to which he received upward of fifty replies. These questions, together with an analysis of the replies, are submitted herewith.

The following is Director Latta's carefully prepared digest of the replies received, and the conclusions reached as a result of the inquiry and some additional study:

"Digest of the replies received.—Many answers to the questions sent out indicate that the writers were thinking rather of cooperation of the Department of Agriculture and the experiment stations with the farmers' institute, although the questions were put definitely the other way. Very few replies make any reference to the National Department of Agriculture. Some replied guardedly, as if they thought cooperation might mean some kind of organization for the purposes of cooperation. One writer definitely states that the Department of Agriculture should devote itself to research work, and leave the several institutions within the State limits to take care of local questions. One superintendent of institutes acknowledged the benefit of having the National Farmers' Institute Specialist at his normal institute. The replies of several expressed or implied appreciation of the publications of the National Department of Agriculture as sources of information for farmers and institute workers. In many cases the institute work is carried on wholly, or almost entirely, by college and station men. In nearly all cases the replies expressed or implied recognition of the value of college and station men as institute workers. Prof. L. H. Bailey, of Cornell University, thinks it advisable to organize university extension faculties, so that the college of agriculture may be represented at the institutes generally when desired. One station director thought the experiment station should not cooperate with the institutes, because of its interference with regular station work. Nearly all of the station directors who have replied recognized that the sending of station workers to the institutes, so far as this is at all practicable, is a substantial gain to the station in various ways. Nearly all the replies recognize the benefit of cooperation to the farmers' institute work in supplying speakers who are experts in their line of study and investigation, in providing more definite and trustworthy instruction, and in giving to the institute work greater prestige than it would have without the cooperation of college and station men. A number of replies indicate additional means and methods of cooperation, although most do not touch this point. Nearly all recognize that the cooperation of the agencies named has resulted in great good to agriculture in one way or another, and nearly all believe that continued cooperation will result in much greater good in the future.

"Conclusions.—As a result of the inquiry, and some additional study, the following conclusions have been reached:

"First. The fullest practicable cooperation between the National Department of Agriculture and the experiment stations on one side and the farmers' institutes on the other is not only desirable but necessary to the highest usefulness of the several institutions and to the cause of agriculture.

"Second. This cooperation should be emphasized by reciprocally helpful relations of all the agencies named.

"Third. The National Department of Agriculture and the experiment stations should recognize the farmers' institutes as an essential agency for bringing the results of their investigations before the farmers in general. To this end they should supply institute managements and workers with as full lists of their publications as possible. They should also request and authorize all institute managements and workers to call attention to their publications and send the same, as far as practicable, to all applicants who attend farmers' institutes.

"Fourth. The National Department of Agriculture may, with propriety, upon request of State institute managements, send its expert workers to a series of institute meetings, so far as this can be done without serious detriment to its investigational work, with a view of encouraging a dormant or struggling industry, arousing interest in some much needed improvement (as highways, schools, etc.), or in some line of production for which the locality is especially adapted.

"Fifth. The experiment stations should, as far as practicable, be represented at all the farmers' institutes in their respective States, and they should recognize every request for a station worker as an opportunity to extend the work and influence of the station and promote that advancement in agriculture for which they were established. This should be done not only because it seems to be the plain duty of the experiment station, but because it will bring increased support to the station and thus enlarge its opportunities for doing good.

"Sixth. The farmers' institute managements should be fully informed as to the aims and work of the National Department of Agriculture and experiment stations, and be in the fullest sympathy and accord therewith. They should earnestly and systematically seek to keep their institute instructors in like manner fully informed concerning, and in accord with, the institutions just named. Institute managements and instructors should constantly aim to inform the farmers at the institutes concerning the work of the National Department of Agriculture and the experiment station, and encourage them to send by formal announcement and by calling attention in the addresses to the definite sources of information which the speakers have consulted.

"Seventh. In all this work of cooperation there should be intelligent recognition of the limitations and prerogatives of the institutions concerned. Neither the National Department of Agriculture nor the experiment station should seek to direct the institute management, but stand ready, upon invitation, to cooperate in every possible way in the farmers' institute work. The institute managements should recognize that there are limitations to the extent of cooperation on the part of the National Department of Agriculture and the experiment stations with the farmers' institutes. These managements should courteously request such cooperation as is practicable, and they should zealously guard the development of any feeling of jealousy on the part of farmers or institute workers toward either the National Department of Agriculture or the experiment station."

Your committee is of the opinion that too little has been done in the way of cooperation of the farmers' institute with school officers and teachers. Director French says: "No systematic work has been done in this direction, so far as I know, in any of the Western States, but it is our custom to enlist the cooperation of the county superintendents and the principals of the high schools in the towns where the institutes are held, and we have received much encouragement from these people in the institute work. It is not an uncommon practice for superintendents and teachers to dismiss their higher grades so that the pupils may attend the institute when it is in session. In some cases the teachers have required the older students to take notes on the lectures and papers and make written report on the work. I have seen some of these reports, and the interest manifested in the subjects discussed is quite astonishing; not only the interest, but the information the pupils are able to get from the lectures and discussions. I think that teachers and pupils are more interested in institute work than ever before, since we began sending out leaflets on nature study, which have undoubtedly created a desire for further information along the line of agricultural science. I always make it a point to send out advertising matter to county superintendents, and in every case I have gotten more or less assistance from these people, and in some cases the interest is quite marked. In the town where the institute is held it is customary for the superintendent of institutes or some member of the lecture staff to visit the public schools and make a talk to the older pupils on the institute work, asking them to attend the meetings as much as possible. This has resulted in some cases, as mentioned above, in excusing the older grades for the purpose of attending the meetings. Since we are putting more stress on normal institute work, I think we shall make still greater efforts to enlist the interest of the teachers and pupils, for in the town where the normal institute is held we shall be able to give some real instructions in elementary science which will be of much value to the students."

In California, in the winter of 1905-6, there was a joint meeting of the California State Teachers' Association and the State Farmers' Institute. This meeting was addressed by Governor Pardee as well as by others especially interested in agricultural education. No doubt great good was accomplished by thus bringing to the attention of teachers some of the problems that confront the farmer.

In the winter of 1900-1901 Director L. H. Bailey, of Cornell, addressed the Illinois State Teachers' Association in Springfield on "*An experiment in extension teaching in agriculture in New York.*" While this was not an instance of

cooperation of farmers' institutes with school officers, it is quite possible that the sentiment in part created by the institutes made this "new departure" in the association seem desirable. In December of this year Dr. A. C. True will address Illinois teachers upon the subject of "The better preparation of teachers for work in the rural schools."

In Illinois more than one-half of the 102 county superintendents of schools most cheerfully cooperate with the officers of the county farmers' institutes, often recommending the dismissal of the schools of the county during the days the institute is in session and the attendance of the teachers and older pupils at its sessions. One superintendent in whose county the schools were not dismissed for the farmers' institute announced that pupils who desired to take part in the corn-judging contests might do so without impairing their record for attendance, the days at the "corn school" being counted as "days attendance." Many superintendents and teachers, upon the invitation of institute officers, accept places on the programmes. In four Illinois counties the county superintendent of schools is the secretary of the county farmers' institute.

As to the cooperation of the farmers' institute with the agricultural college, let it be said that this is for the most part indirect or incidental, but important and effective. The institutes are much closer to the experiment stations than they are to the colleges. They have their roots in the station work. It is men from the station, not the college, that are wanted as institute speakers. In return for this invaluable assistance the institute helps to create sentiment that makes larger appropriations for experimentation possible.

While the adult farmer looks to the station as his source of scientific knowledge, the youth naturally looks to the schools and the college. Moreover, the farmer who has become interested in a superficial and empirical way in station lore, desires for his son a more profound and rationally scientific knowledge of agricultural principles and practice. While he wants the station only for himself, he wants the college and the station for his son. Hence, for the sake of the next generation of farmers, the institutes should deliberately plan to interest the young people in the problems that confront their elders and turn the faces of these young people toward the agricultural college. It is true that comparatively few can take the college course; but the many should have their faces turned toward these higher institutions of agricultural learning and may gain for themselves what is rapidly being introduced into the curricula of the common schools through the influence of the college and station. What, then, the institutes should do for the agricultural colleges is to assist in sending to them the young people, at least for the short course, and for the long course whenever practicable. The institutes should help to popularize the college and agricultural school and to create such sentiment as will make it easily possible to secure all necessary financial support.

In view of what has been represented in this report, your committee begs to offer the following resolutions for the consideration of this body:

Whereas the amount of instruction given by the farmers' institute at its very best is of but slight significance when compared with what a twentieth-century farmer should know; and

Whereas the number of people who attend the institutes is surprisingly small compared with those who need more agricultural knowledge and inspiration; and

Whereas these conditions must always exist as long as but one or two institutes a year are held in counties containing several hundred square miles: Therefore, be it

Resolved, That it is the sense of this association that an important function of the farmers' institute is one of cooperation with other educational agencies;

That the institutes should, whenever possible, be so managed as to bring together a goodly number of those engaged in agricultural practice;

That there shall always be some instruction that is in accord with the work of the experiment station and the United States Department of Agriculture;

That this instruction should be so presented as to awaken interest in what is being done in agricultural investigation and turn the attention of the people to the sources of information;

That the young people and their teachers should be invited to attend the institutes and the programmes should be so arranged that their interest in agricultural education may be awakened and the cooperation of the schools secured.

In a word, it is the sense of this body that the aim of the institutes should be—

- (1) To teach a few things.

(2) To do this so well that the desire to know many things will be created.

(3) To point the way to the sources of information—for adults, the station and the Department of Agriculture; and for young people, the schools and agricultural colleges.

(4) To make sentiment in favor of a liberal support of all these educational agencies.

ANALYSIS OF REPLIES RECEIVED TO LIST OF QUESTIONS SENT OUT BY THE COMMITTEE CONCERNING COOPERATION OF FARMERS' INSTITUTES WITH THE EXPERIMENT STATIONS AND THE NATIONAL DEPARTMENT OF AGRICULTURE.

Question 1. To what extent is such cooperation desirable?—Answers. To the fullest extent practicable, 41; enough to unify methods of instruction, 2; to a limited extent, 2; to some extent at least, 2; so far as not to seriously hurt station work, 2; cooperation of station with farmers' institutes not advised, 1; cooperation with the National Department of Agriculture not advised, 1; the National Department of Agriculture should cooperate by sending its publications, 2.

Question 2. To what extent has such cooperation been practiced in your State?—Answers. To the fullest extent practicable, 44; to a limited extent, 6; very little cooperation, 1; National Department of Agriculture sent forestry lecturer, 1; free transportation furnished institute speakers, 1.

Question 3. What means and methods of such cooperation have been employed?—Answers. By providing funds for institute work, 15; by sending speakers from college and station, 38; by holding conferences or normal institutes for institute speakers, 5; by sending out station publications, 7; by visits of station men to farms of institute workers, 1; by furnishing office for superintendent of institutes, 4; by correspondence, 1; by providing institute workers with means of illustration, 1; by station extension work at institutes, 1.

Question 4. What additional means and methods would you recommend?—Answers. Give institute speakers regular instruction for their work, 5; send more station and college men to institutes, 10; have institute speakers and station staff visit each other, 1; organize a farmers' institute bureau under college and station auspices, 1; let college and station supervise institute work, 2; have farmers' institute advertise experiment station, 1; let more specific instruction in the results of station work be presented at institutes, 1; let station men get with farmers at institutes, 1; let the station and college officers constitute a board of supervision for farmers' institutes, 1; let the institutes distribute blank request cards for publications of station and National Department of Agriculture, 1; provide faculties for extension work at farmers' institutes, 1; hold more institutes, 1; let Department of Agriculture prepare courses of study for farmers, 1; use any other means that may seem feasible, 2.

Question 5. (a) In what ways has such cooperation been helpful to the experiment station?—Answers. By making the station more popular, 29; by giving station men a knowledge of the problems of the farmers, 22; by securing closer contact of station men and farmers, 12; by assisting the station in planning its experiments, 3; by securing financial support for station, 4; by inspiring confidence in the work of the station, 4; by providing station with lists of active influential men, 2; by keeping station men informed as to agricultural progress, 1.

Question 5. (b) In what ways has such cooperation been helpful to the farmers' institute work?—Answers. By furnishing good speakers for institutes, 31; by giving better instruction at institutes, 31; by enabling the farmers to do better work, 5; by inducing the farmers to use new seeds, breeds, and methods, 1; by providing institute workers and farmers with literature, 1; by increasing prestige of farmers' institutes, 5; by reducing expenses of farmers' institutes, 1; by reducing the fancied walls of separation, 1.

Question 6. What results beneficial to agriculture have been attained in your State by such cooperation?—Answers. Farmers more intelligent, 10; better methods of farming, 17; better results on the farm, 7; confidence in work of station, 7; better methods of feeding, 4; better methods of orcharding, 4; better methods in dairying, 2; more intelligent use of fertilizers, 2; better livestock, 3; general improvement, 2; crop rotations adopted, 2; wider agricultural education, 2; creameries built, 1; agriculture diversified, 3; alfalfa culture encouraged, 2; earnings of farmers increased, 1; land doubled in value over considerable areas, 1; diseases prevented, 1; seeds improved, 1; better knowledge of soils, 1; many, 1.

Question 7. What additional results may be expected from continued intelligent cooperation of the agencies above named?—Answers. The good work already accomplished will continue and increase, 22; more general education of the farmers, 8; greater agricultural progress, 8; better farm homes, 2; increased rural attractions, 2; wider cooperation of the agencies concerned, 4; demonstration experiments on many farms, 2; closer organization of the several agencies in the interest of agriculture, 1; more specialties in agriculture, 2; results of incalculable value, 1; better live stock, 1; no limit to good that may be accomplished, 1; many, 1.

Respectfully submitted.

F. H. HALL,
H. T. FRENCH,
W. C. LATTA,
Committee.

The following report was presented by John Hamilton, of the U. S. Department of Agriculture:

REPORT OF STANDING COMMITTEE ON MOVABLE SCHOOLS OF AGRICULTURE.

Your committee on movable schools of agriculture feel that it is unnecessary to enter upon any extended discussion of the need for specializing the work of the institutes so as to devote more time to the study and discussion of single features or divisions of agriculture than has been given heretofore. The numerous questions in an institute that follow the presentation of an agricultural topic of local importance show in an unmistakable way that at least the more intelligent and progressive farming people are not only anxiously seeking for additional information respecting their art, but that the lecturer has been unable to satisfy their desires in this respect in the forty or sixty minutes that are at his disposal.

Appreciation of instruction upon special topics is further evidenced by the number who come to seed and soil lectures given from institute trains, and by the attendance at annual meetings at the agricultural colleges and experiment stations for instruction in special subjects, as butter making, poultry rearing, or fruit growing, and kindred topics.

All thoughtful institute workers have observed these and similar manifestations of interest, and need no additional proof to convince them of its existence and extent.

The general appreciation of the need for giving more specific instruction in special departments of agriculture raises the question of the method or methods best to be employed for satisfying this desire; the form of organization, and the courses of study that the institute shall adopt that will enable it to meet this demand, and that shall provide it at moderate expense.

The ideal preliminary training in agriculture is a full course in a well-equipped agricultural college. To all except the very few this is out of the question. Statistics show that less than 6 per cent of our population, city and country, ever get beyond the common schools. It is therefore, the education in agriculture of the country portion of the 94 per cent that constitutes the problem that needs solution.

Your committee believe that ultimately preparation for understanding agriculture as a science and to some extent as an art must be given in the schools, and that this instruction will in some form not yet perfected be made a part of our educational system, extending from the kindergarten to the university. What the institutes are now doing is preparatory to the inaugurating of such a system.

The institutes have been awakening the great mass of agricultural workers to some realization of what there is in science that is of practical value in their calling, and to the need for better methods if agricultural people are in the future to successfully compete in the markets of the world. Their work has largely been the heralding of possibilities, and the gaining of disciples to preach the new gospel of scientific agriculture, and to discover and organize a system that will be broad enough to reach effectively with extended and accurate agricultural instruction all who need its aid.

What shall be the form of institute development that will adequately provide this more advanced and specific instruction? In other words, what shall be the

next step in institute development in the direction of providing for the more complete satisfying of the needs of agricultural people?

In a government by the people every important measure for the public good must first be passed upon by the majority of those who are in control. The bringing of this majority to understand and appreciate the measure and to be convinced of its practicability is therefore a primary necessity before it can be put in operation. As has been stated, the institutes, at least in the States in which they have been longest conducted, have brought the majority to appreciate the value of the truths that agricultural science has to teach. The next step, therefore, is to demonstrate the practicability of imparting these truths with sufficient particularity, adaptation, and extent to be of substantial benefit to the working farmer in increasing his earning power.

The movable school promises to provide such a demonstration. It deals with a single item or subject in agriculture, and it deals with it both in a theoretical and in a practical way. It explains the theory and then teaches by doing. It requires those who enter its classes to study first the fundamental principles that underlie the process and become familiar with what men have done in the direction of the specialty under consideration, and then the students are required to perform the operation for themselves. By this means conviction of the practicability of the method is impressed, and confidence in their ability to carry on the operation for themselves in a practical way is imparted.

The movable school is first of all a carefully prepared course of study extending over sufficient time to teach the subject thoroughly and render the student familiar with the practice work which the course prescribes. It is given to classes regularly organized and limited in number whose members agree to complete the course. It is equipped with all of the apparatus, books, and material needed for presenting the subject in a most thorough manner, and is conducted by a teacher who is an expert in expounding and illustrating the theory of the subject and in directing the practical features of the study. The students are men and women of mature years, and of experience in the direction in which the instruction is to be given, having sufficient preliminary education to enable them to understand and participate intelligently in the requirements of the course.

The classes in these schools are designed to be organized by the State director of farmers' institutes, be conducted under his general supervision, and be sustained by the financial aid which he provides.

The National Department of Agriculture, in its Office of Experiment Stations, has in preparation six courses of study for movable schools of the character described—cheese making, butter making, fruit growing, poultry rearing, farriery, and domestic science. The course in cheese making has already been published and is a sample of what is proposed. Three others are about ready for sending to the printer. Your committee recommend that the State directors examine this sample course now published and the other courses as they are issued, and wherever practicable start one or more of these schools in operation as a test of the practicability and value of this method of reaching adult farmers with reliable and useful agricultural instruction. They further recommend that the following resolutions relating to the further development of this system of movable schools be adopted:

Resolved, That this association, appreciating the importance of providing more systematic and extended instruction in agriculture in the farmers' institutes, hereby express its approval of the use of the movable school of agriculture as an instrument for this purpose.

Second. That it commends the form of organization outlined and courses of study prepared by the National Department of Agriculture for the establishment of such schools, and hereby earnestly requests the committees of agriculture in Congress to recommend, and the Congress to pass an appropriation sufficient to enable the Department to perfect plans and courses of study, and to organize, equip, and place in operation in charge of competent experts a number of these schools as demonstrations of their value and practicability.

JOHN HAMILTON,
F. E. DAWLEY,
A. L. MARTIN,
Committee.

The next report is by the committee on boys' and girls' institutes.

F. H. RANKIN, of Illinois. The chairman and members of this committee had a meeting and they agreed that its work should be subdivided. The questions were sent out by, and the replies were addressed to, Mr. P. A. Yoder. Mr. Yoder attended to the correspondence and has made up the report to which the committee has agreed.

P. A. Yoder, of Utah, read the following report:

REPORT OF STANDING COMMITTEE ON BOYS' AND GIRLS' INSTITUTES.

Since the subject to be considered by this committee is a new feature of this association we deemed it advisable to limit our efforts this year to the collection of data respecting what is at present being done by the farmers' institutes for the boys and girls. Pursuant of this end your committee submitted the following questions to the State superintendents of institutes:

(1) Have you held, during the past year, any boys' and girls' institutes? If so, how many? What was the average attendance?

(2) Have you, in regular farmers' institutes, had any special features to interest the farmers' boys and girls?

(3) Do you secure regular attendance of boys and girls at the regular institutes where no feature especially for boys and girls is upon the programme?

(4) What is the nature of the institute and the feature of the programme for boys and girls which you have found most successful?

(5) Have you any lists of publications that you have found helpful to you in interesting the farmers' boys and girls in agricultural subjects? If so, please send us the lists, or information as to how to procure the same.

(6) State anything else concerning boys' and girls' institutes in your State that you deem would be of interest to this committee.

Replies were received from all of the States excepting twelve. In the following digest of these replies we present some of the main features derived from them, which we hope may prove of some interest to this association.

The general fact is that very few States have done anything in the line of holding distinctively boys' and girls' institutes, but a number have incorporated in the regular farmers' institute work features adapted specially for the boys and girls. One State (Illinois) reports a tentative plan under which they expect to hold this winter, partly by way of experiment, three sessions of institutes in that many different towns in each county, specially for boys and girls. Another State (Indiana) reports a number of boys' clubs and girls' clubs being organized. Several States had sessions of institutes specially for the boys and girls, and in several cases schools were dismissed to permit the pupils to attend the institutes. In one instance the pupils were required to report the institute proceedings as an exercise in English composition. Valuable suggestions have been received from the correspondence respecting methods for interesting boys and girls in agriculture and in the farm home.

Several States report that their general farmers' institute work is in its incipient stage, and that, therefore, the time is not ripe for branching out in the special lines suggested. Reports from several other States indicate that this field is occupied or left to be occupied by other organizations, usually the public schools, and that they are not regarded as falling within the province of the farmers' institute organization. In other cases hearty cooperation between the public school authorities and the farmers' institutes is reported. The introduction of agricultural studies in the curriculum of the rural schools by many of the States is paving the way for cooperation with the institutes.

The following features in the institute work were reported as having met with success in arousing interest among the young people:

(1) Exhibits of agricultural products raised by the boys, and of culinary and sewing products prepared by the girls.

(2) Judging contests involving field crops, live stock, and food articles.

(3) Nature-study exercises.

(4) Lectures by special speakers and on special subjects designed especially to reach the young people.

(5) Lectures illustrated by the stereopticon.

(6) Participation in the programme by boys and girls, with singing, recitations, essays, etc.

Among these features the exhibits and the judging contests seem to have aroused the greatest enthusiasm. Usually prizes are offered. In a few States an ingenious combination is made of awards in the contests and encouragement to higher agricultural education. For example, the boy who raises and exhibits the best corn in his county is awarded a free trip to the college of agriculture, with his expenses paid, to attend a special short course. These contests are managed systematically, the plans usually being outlined by the faculty of the agricultural college, and the details attended to by the local school officials or county farmers' institute officials. Corn seems to be a crop that is especially well adapted for these competitive contests in either raising the crop or judging exhibits of it. The States which have introduced this feature are all in the corn belt, and include Illinois, Indiana, Kansas, Nebraska, and Wisconsin.

Much sound instruction and training in agriculture is doubtless imparted by skillful lectures selecting nature-study objects for presentation, such as birds, demonstrations in plant growth, fruit culture, etc.

The stereopticon attracts the young people, and arouses much enthusiasm when used skillfully in presenting agricultural subjects.

It has always been regarded as good pedagogy to seek to interest the individual in some particular study or operation by getting him to participate in it. This principle finds application in the contests. It may also be applied in the arrangement of programmes. If a boy or girl does no more than participate in the singing, it secures his presence and that of many companions and opens the way for arousing a more deep-seated interest.

Very little, if anything, seems to be done by the farmers' institutes in the way of providing or suggesting agricultural reading matter especially suited to the boys and girls for home reading. This is apparently left for other agencies to carry out. One State (Kansas), in a published farmers' institute report, lists some suitable books on agriculture for school libraries, and announces an arrangement whereby traveling libraries are established for farmers' clubs, etc. Other States have elaborate systems of traveling libraries or systematic instruction under agricultural college or university extension management.

That there is certainly very general interest in the subject of boys' and girls' institutes is indicated by this correspondence. This interest may be viewed as part of the general movement for more extensive instruction in agriculture among the rural young people, which has manifested itself in recent years, not only by greatly swelling the attendance on the agricultural courses in our agricultural colleges, but also by introducing instruction in agriculture into the public schools.

There are various agencies at work along these lines. In some States there seems to be no need for the farmers' institutes taking it up. In others the farmers' institutes appear to be about the only organizations through which we can hope that the possibilities and advantages of agricultural education can be brought to the attention of rural people.

F. H. RANKIN,
E. A. BURNETT,
P. A. YODER,
Committee.

W. L. Amos, of Maryland, chairman of the committee on legislation, reported as follows:

REPORT OF STANDING COMMITTEE ON LEGISLATION.

Your committee has been active, but is not prepared to make a written report. The matter has been discussed, but it is not clear in our minds what should be done. It has been recommended that we might gather the laws of all the States and provinces on farmers' institutes, and from them prepare one that would suit the conditions of all. But no one of the committee felt that he personally had time to undertake such a work.

The meeting adjourned until 9 o'clock, Tuesday, November 13.

MORNING SESSION, TUESDAY, NOVEMBER 13, 1906.

The session was called to order at 9 o'clock a. m. by President Creelman.

THE RURAL SCHOOL; HOW CAN THE FARMERS' INSTITUTE AID IN IMPROVING?

L. H. BAILEY, of New York. Not being an institute worker, and only rarely in recent years an institute lecturer, it is somewhat presumptuous in me to say anything to institute men in regard to the condition of institute work. I am intensely interested in all educational propaganda which may make for the advancement of the institutes in their relation to the rural schools, for of all the work which I have ever touched I feel that the rural school is the most important.

This subject divides itself naturally into two general classes, (1) the nature of the organization and the character of the rural school, and (2) the nature of the institute. I do not doubt that the character of the work that is done in the rural school will depend largely on the efficiency of the institute work. I have several categories which I would like to present you merely in the way of suggestions in regard to the field of institute work where experiences of my own have led to interesting results, all of which are familiar. In the first place, I would make the proposition that all institute work should be extension of the work of the agricultural college. In the second place, it follows naturally that those who are engaged in this institute work and extension organization should be men who are purposely, conscientiously, and definitely trained for that particular kind of work. We are training men in our colleges to be economists, entomologists, horticulturists, but we are not training them in college to be extension workers.

Speaking personally I will say that we have a reading course in the college with which I am connected, and we have at least three farmers' institute supervisorships, every one of whom has taken the supervisorship as merely temporary work, or until a vacancy in the institute workers occurs, which he will be able to fill. A number of letters have come to me about this subject, and I have said that I would let a farmers' institute go rather than have to take a man who did not think that a public supervisorship of farmers' institute work is not just as important as any other professional occupation and that he has taken it for his life's work.

The work of the college of agriculture, as I say, divides itself naturally into three coordinate parts, one the academic, one the teaching by research and investigation, and the third the extension work; and the extension work is just as much a part and parcel of the work of the college of agriculture as academic teaching is. Their purpose is to take the point of view and impressions of the college direct to the people whenever the people can not come to them. Third, it follows also, necessarily, that the instruction of the college must be felt directly by the farmers. They become engaged in a general elevation of the Commonwealth. I think that now the time has come when it is necessary to take up definite, conscientious, constructive work—work which should be definite in character and definite in scope. And, fourth, one of the phases of this work should be the reorganization and the redirection of the rural school.

Now, from these four propositions follow certain questions—questions of methods as to how an institute worker, for example, can get at the specific problem, which we now have in mind, of the redirection of the rural school.

I assume, for the time being, that the rural schools themselves need redirection. I want to explain, in the first place, that there may be rural school institutes which may have for their purpose the propaganda of the agricultural college. Just what work they are doing—the character of the work they are doing—must to a large extent be governed by the attendant local conditions. I am wondering whether the time has not come when the farmers' institutes must take up the organization of institutes for the development of the rural schools, just as they have taken up in their institutes the development of horticulture, dairying, and the general improvement of the farm.

Secondly, I am wondering whether this can best be accomplished by having vital cooperation of the educational organizations in the State. Of course, these can become of very great efficiency. In my own State I will say that we are holding these teachers' conventions, and practically all the farmers are asked to attend such teachers' institutes. An appropriation has been

made by the State legislature, whereby the State educational department sends members of its force to talk at these institutes. Those persons have learned many things from this source they never knew before.

Third. I am wondering whether it is not the common province of all farmers' institute organizations not only to hold institutes here and there which are cooperative meetings, or for individual or special purposes, to consider horticultural, dairying, or other agricultural subjects in this farmers' institute school, but also for the special purpose of considering the reorganization of the rural school.

In the fourth place, I am wondering whether, as a part of the farmers' institute work, there should not be some accredited organization whose aim it shall be to lead directly the school organizations or associations in the State. These same organizations should try to get hold of the trustees in the various school districts, perhaps by correspondence or otherwise, and keep them in close touch with the work.

But after all, all of these suggestions are really subordinate to the main theme of my topic, which is the character of the work which needs to be done. And here again I wish to make several propositions, some of which I try to believe are good. These are propositions which are of course common to all education, and which I wish to try to make specially applicable to the rural school. I may say, in the first place, that all education should develop out of experience. It is fatally wrong, physically wrong, to begin education with books. Further, it is materially wrong. The best schools in the world to-day are not called schools. They are called "factories" and "shops." The most definite and direct training in the world to-day is in the factories and shops, and they have first-class teachers in those institutions called "foremen" and "bosses," but they teach and they train. All education should develop out of experience.

Every educational enterprise—that is to say, school—should be the natural expression of its community. A school that is not the natural expression of its community is exotic, and to that extent is inefficient and ineffective. The most significant commentary on our conditions is that our schools do not represent our ideas. One of your Southern writers has said that one of the faults of our educational system is that the lamp of our learning has been lowered down from the university to the common schools of the people.

I should say that all education should be founded on work. It is fundamentally erroneous to put any child into books until the child has learned to work; for if it is true that modern civilization rests on personality, then it is true also that it rests on definite, individual, personal accomplishment. It is fundamentally erroneous, I think, to try to give any race of people what we commonly call education until they have first learned how to work.

We have in our college of agriculture eight Indians. I have had frequent discussions with these young men as to their points of view. They come into this country principally from the East, from the southern part of Asia—from countries which have been suppressed and subjugated by monarchical governments. They have brought with them some of the fruits of their nationality. It seems to me that the first thing they will have to do when they go back to their country is not to teach their people the schooling, but to teach them how to work, for from what I can learn they have not yet learned how to work in those countries.

Fourth. If the school is the natural expression of its community, then it has local interest and local intent, and here I come to the vexed question of the consolidation of the rural schools. I do not know whether what I have to say has any application to the parts of the country represented by any person here. I find it has some application to the part of the country from which I chance to come.

Much has been said about the consolidation of the rural schools. I have read much about it. I believe in it, but not heartily—not clear down to the soles of my feet. The reason for the advocacy of the consolidation of schools is chiefly this, that all the small town schools have been developed greatly, and the rural schools have not been developed. The town schools are drawing away from the rural schools until they have become sorely depleted. They all compete with the rural schools, and we have come to think that they must have better pay, and better teachers, and more money, and more apparatus, and more facilities with which to do their work. That is all true. I think sometimes, however, we can have too much apparatus. It does not follow that efficiency in education increases with the quantity of apparatus. It does not mean that effi-

ciency in education increases with the equipment. We all agree, I suppose, that the country schools must have more money and better teachers. How shall we raise that money? In our State (New York) the country people do not pay as much on the dollar for the maintenance of country schools as the people in the cities and towns do. There is no reason why they should not. There is no reason why the people in the country should not pay as much as the people in the villages and towns do for their schools; but they do not do so. And so consolidation, therefore, seems to be the only alternative. Yet it is not the only alternative, for, gentlemen, the time is coming when there is going to be direct State appropriations to maintain rural schools. That, after all, is the solution of the problem. It may not come in your time, and it may not come in mine; but some of our Commonwealths to-day maintain rural schools—some of them inefficiently, some of them adequately. Our State will appropriate \$100,000,000 for a canal for the use and benefit of Iowa and Illinois. It has agreed to spend \$100,000,000 on roads, \$50,000,000 of which are to be appropriated by the State itself. We can afford to put \$10,000,000, \$15,000,000, \$100,000,000 in rural schools also. That is the solution. We may not need one-tenth of that; but the time is coming when we are going to maintain the rural schools of the United States by direct appropriations by the legislatures.

I would not advocate the consolidation of the rural schools because it is economical, but I would advocate their consolidation because it may be possible to make them pedagogically efficient. The arguments against consolidation—you know what the objections are—but the one fundamental argument against consolidation is that if we are to develop individuality in the country, if we are to develop our agricultural interests—I mean develop its local interest, and all the agricultural development has been through local interest—then we must have our local schools. I know how farmers feel about the moving away of the country schoolhouse, even when there are but four or five children in the school. They feel that something has gone out of that community. Local pride, local sentiment, are gone. I think we can crystallize that local sentiment; but I do not look upon consolidation as a solution. I believe in school consolidation whenever pedagogically it seems to be wise. The economics—well, I think we can find the money by some means. The rural school needs to be redirected and redirected within itself.

I have said that the rural school is exotic. The time will come, possibly within the lifetime of some of us, when in the district school there will be but one subject that is taught, or when the same subjects as are taught now are going to be taught from a very different point of view. The latter proposition we all accept; but, for the time being, let us accept a proposition which I think is fundamental to all education—that the educational purpose is effective in proportion to the character and strength of the teaching, and not in proportion to the number of subjects taught. Every time a subject is clamoring for entrance into a curriculum does not mean that it should be included in the curriculum. It does not follow because a subject is worth while to be discussed in a community that it should be introduced into the schools. All kinds of subjects are to be taught in the schools; but not all subjects in all of the schools.

Now, I have noticed that something has been said about our farm labor. The trouble with our farm labor is that we have not yet begun to train the farm artisan. There is no pride of artisanship in the farm occupations, and when we begin to train the farm artisan we will begin to see the farm problems take on a different phase. I tried an experiment on my own farm. We had about three years ago an old piece of gas pipe which had burst in the winter time, lying against the doorpost of the barn. Three administrations had lived on that farm—each one a year. Every one of those persons—they were managers—had gone into that barn door at least three times a day. That is to say, each one had gone into it a thousand times. In other words, that piece of gas pipe had been passed at least 3,000 times. The other day I moved it 6 feet. I expect at the end of three years to move it 6 feet farther. One of the troubles with these men was that they lacked the pride of artisanship. The whole solution of your farm problem lies in training somewhere. It is not immigration that will help you. It is not any sort of education. It is training. It can not be met with the agricultural college. It can not be met with the school as now organized. It is going to be met by some kind of local enterprise.

Now, as I have said, the schools are not effective in proportion to the number of subjects taught in them. I should rather have just one subject, and have it taught well, than to have 20 subjects, none of them taught well. We are in-

troducing too many new subjects into our schools. There are three kinds of education. One, whereby you pour from one pitcher into another pitcher, the difference in efficiency being limited as to the size of their mouths and the length of their ears. Second, through the laboratory. You can be just as inefficient in a laboratory as you can be efficient. Thirdly, we have not yet come to it—the question and the answer. We have not come to that yet; but we will. I am waiting for the time when some great teacher will arise in every institution and will give a course of teaching announcing no subject. That won't come in the rural school. But a few subjects, properly taught, is the ideal curriculum for the rural school. We must have a full reorganization and redirection of the rural schools. I would like to see agriculture taught in the rural schools, but effectively taught. Now it does not go far enough. It will never solve the problems of the farm. What is geography? Don't you and I study geography from the localities around us? Teach the child geography from the standpoint of his local surroundings and you will teach him more geography than you can from books. It is the local geography which is of interest to all of us.

Reorganize your rural schools, and you can reorganize the agriculture of your vicinity by means of geography just as well as you can by putting another subject into your curriculum. The application of your subject should have local significance. No reason why arithmetic should be mere puzzles in figures, nor that history should be mere revolutionary problems. You may revolutionize the rural school simply by teaching them in nature's way. It is the combination of accurate thinking with accurate doing that a thousand and one problems in every rural community can be solved.

I would have the rural school work so redirected, so naturalized, so fundamental, and so individualized, that if the school is in a rural community it will not need to have agriculture introduced into it, because agriculture from a nature-study point of view will be just as much a part of that rural school as oxygen is part of the air.

J. L. Ellsworth, of Massachusetts, read the following paper:

THE TOWN AND CITY RESIDENT; WHAT CAN THE INSTITUTE DO TO INTEREST HIM IN RURAL LIFE?

In opening this subject from the Massachusetts standpoint a few figures and percentages from our State census for 1905 will be illuminating, as showing the relative proportions of our population engaged in agriculture and in other gainful occupations. According to the statistics gathered by our State bureau of statistics of labor, which has charge of the census work in Massachusetts, the number of persons engaged in gainful occupations in 1905 was 1,982,998. The classification includes government service, professional life, domestic service, personal service, trade, transportation, agriculture, the fisheries, manufactures, mining, laborers, laborers (farm), and apprentices. Of the nearly 2,000,000 people included in these various classes 39,615 are included under the head of agriculture, or practically 2 per cent. If we add to this the 26,155 included under the head of farm laborers we have 65,770 persons, or 3.3 per cent of those engaged in gainful occupations, who are directly interested in farming as a means of livelihood.

These figures are interesting as showing the relative number of our rural population as compared with the city and town dwellers. It should be observed, of course, that the families of those directly interested in agriculture are not included in the above figures, but as the same is true of the families of those engaged in other occupations, the relative percentages and comparative totals would probably not vary to any appreciable extent.

On a first examination of these figures it would appear, certainly, to anyone not entirely familiar with Massachusetts conditions, that with us it would be imperatively necessary to interest the city and town residents in our institute meetings to save them from absolute failure. For if but 3.3 per cent of our total population is interested in agriculture, it may well be asked where we expect to obtain our audience if not from the cities and large towns. It must be borne in mind, however, that these 65,770 are distributed in a territory that is minute in comparison with some of the Western States, hardly more than a Texas county, and also in a country covered with a network of railroads and electric railways, so that it is possible for them to each and all reach our institute meetings with a facility that is not easily duplicated in other States.

In further opening the subject, I would say that the question of interesting the city and town residents in the institutes has not been brought to me as a practical question up to the present time, as we have not as yet been able to furnish all the meetings called for by our strictly rural population, so that the ideas which I shall advance must be regarded only as theories and not as announcements of demonstrated facts. They will be theories based on observation, however, and not entirely guesses as to probable results. I am aware that this statement calls for a certain amount of explanation. With only a small proportion of our population interested in agriculture, we are obliged to go to our legislature asking for appropriations for agricultural projects rather as a matter of favor than of right, and the response, while always generous, does not run into as large figures as in the great agricultural States, where the great bulk of the population is rural and engaged directly in agriculture. So far our "dissemination work," as we call it, taking the term from the clause in the law establishing our board of agriculture which allows us "to expend money for the dissemination of useful information in agriculture," we are allowed in toto \$3,000. All this can not be expended for institute work, as we must take from it the necessary money to pay for issuing our crop bulletins, nature leaflets, excerpts from our annual reports, and miscellaneous matter in the way of disseminating useful information, etc. As a matter of fact, our expenditure for farmers' institutes rarely rises much above \$1,700, and in 1905 fell slightly below that figure. With this sum we held 125 institutes, with 153 sessions, and a total attendance of 19,172. We were obliged, however, to refuse many meetings that would have been interesting and well attended because of lack of funds, and for the same reason could not open up certain lines of new work that seemed almost imperative. This being the case, with our farmers not receiving proper attention, from lack of funds, we have felt that as yet we could not take up the problem of interesting our urban population in these meetings, beyond the natural interest which they now feel and manifest.

That there is an interest in our meetings in our cities and large towns can not be denied, and we sometimes feel that it is fully as enthusiastic and well sustained as that of the farmers themselves. There is in the mind of every business man and factory or office worker somewhere the feeling that he desires to get out of the city and into the country, away from his desk or bench and back to the soil, and they all are firm in the belief that if they had the money or time they could make a grand success of country life. This being the case, there are many of them who take a deep interest in agriculture, who obtain our reports and bulletins and those of other States and the National Government and read them with a great deal of interest and enthusiasm. To these men, and I will add women also, for this feeling is as strong with the gentler sex, our farmers' institutes are already attractive and interesting, and there are many of them who never let an opportunity to attend one slip by. To these people, who have a theoretical knowledge of agriculture that is really astonishing, the best inducement that can be offered is an interesting lecture on some live farm topic by a recognized authority on the subject. And let me say that I have no sympathy with any other policy than that of attracting the city and town residents by strictly agricultural matter and strictly agricultural treatment of it. It would be possible, perhaps, though I am by no means certain of it, to draw large attendances in some of our mill towns and industrial centers by popular lectures on the topics of the day, with perhaps a slight admixture of agriculture to bring them within the institute fold, but I should not approve of any such effort, nor, I am convinced, was any such thing contemplated by the committee who arranged the programme.

Therefore if we will give the city and town residents good agricultural doctrine, from recognized authorities, with meetings placed where they are easily accessible to them and properly advertised through the press, by posters, and postal-card notices, I am sure that the problem of interesting them in the institute work will be solved to the satisfaction of all concerned. Of course the placing of the institute where the city resident, who usually does not own a horse and carriage or other means of conveyance, can reach it may not always be practical, as the farmers back in the country are the ones for whom the meetings are primarily designed, and their desires and convenience must be first consulted.

Many of our town residents have small areas of cultivable land attached to their home lots, enough for a small garden, to keep a few hens, and perhaps, in

some instances, to raise their own potatoes and other vegetables for winter, in whole or in part. There will be for such people very many subjects which are of interest to them and, at the same time, of importance to farmers situated as are ours in Massachusetts, with a market practically at their doors. Poultry culture, garden making and care, the preparation and management of cold frames, hotbeds, and greenhouses are all subjects which will interest and instruct both these town dwellers and the practical farmers who must get their whole living from the soil.

The question of advertising is one that is worthy of particular attention if we would attract the city and town resident. These people are usually continuous and careful readers of the local and metropolitan papers. Therefore a news item calling attention to the meetings to be held in their home town, inserted, let us say, about four days before the meeting is to take place, will bring the meeting more surely to their attention than will any other advertising medium. As the advertising of our meetings is in the hands of the local societies, and the expenses are borne by them, we can only offer them suggestions and extend the guiding hand where it will be welcome, but our own experience has shown that the press of Massachusetts—and I doubt not that the same is true in many other States—is always willing to give space to the announcement of such meetings and will often report their proceedings considerably in detail. Posters are of some value for advertising purposes, but there are so many billboards in our towns and cities, and so many things, from breakfast foods to traction engines, advertised upon them, that it is doubtful whether the results obtained are commensurate with the expense in the advertising of institutes. Postal-card notices are, of course, effective means of notification where the people in charge of the institutes have a proper list of those likely to be interested, but they are hardly within the range of the possible as a means of notifying town and city residents owing to the necessary expense and relatively large number that would necessarily go to those little interested in the meetings. In the last analysis, therefore, we are driven back upon the press as a means of notifying the city man or town man, and, as I have attempted to point out, we are sure to find a ready and valuable assistance from this source.

There is another line of work which we have developed here in Massachusetts, which my observation shows me to be particularly interesting to the town or city man. That is the demonstration work which has been the feature of the summer field meetings of the board of late years. Three years ago we held a meeting of this sort at the Massachusetts Agricultural College, at Amherst, and it was so well received that we have repeated it each year, at different places, with increasing success. This year the meeting was held in Fitchburg, in the open-air theater at Whalon Park, with an attendance estimated at from 1,000 to 1,500, the largest ever gathered, so far as the records show, at an agricultural meeting in Massachusetts.

At these summer field meetings we have demonstrated the preparation and application of Bordeaux mixture; the preparation of the lime, salt, and sulphur wash for the San José scale; the workings of the Babcock milk tester and of Farrington's pasteurizer, as well as of various makes of separators; the points of the dairy cow, as contrasted with the beef type; the killing and dressing of fowls for the city market; the proper preparation of fruit and the desirable kinds of fruit packages; the sanitary handling of milk, with the apparatus required; the sowing of the seed and the transplanting of the kinds of vegetables and market-garden crops most difficult to succeed with, and the packing of apples for market. In all these subjects the entire operation has been shown to the audience and explained step by step as it went along to full completion. These demonstrations have excited a great deal of interest and have shown themselves to be increasingly popular. They have been carefully followed both by farmers and by others who hope some day to be farmers, the very city and town people whom we have been speaking of. My observation shows me that these people find this line of work even more to their taste than do the practical farmers, and I am convinced that if we had the means, the men, and the apparatus at our disposal, and it seemed advisable to expend the money in that way, we could draw large audiences to a series of such meetings held in the cities and large manufacturing towns.

There appears to be a fascination for everyone interested in agriculture in seeing the particular features of the calling exemplified before the audience, even where they are more or less familiar with the matters under discussion from actual experience. This fascination is vastly more potent with those

whose interest in agriculture is theoretical and whose knowledge of its processes is based on reading and study rather than performance. For this reason the city man will sit through as long a demonstration as you care to give him of various farm matters and leave the meeting loud in his praises of the work accomplished. Such work as this is therefore directly in line with the topic which we are discussing.

We may also interest the city and town resident in the institutes by interesting him in the agricultural societies, the grange, the harvest and farmers' clubs, or other agricultural organizations. In Massachusetts most of our agricultural societies are so situated as to be at the doors of the city and town residents, and at most are always easily accessible. Interest the business man in the business end of these organizations, with their annual exhibitions, and you interest him in the other activities which take up the attention of the members between fairs. With us the grange is not the strictly agricultural organization that it is in some more purely agricultural States. In many of our cities and large towns there are large granges, numerically speaking, the majority of the members of which are not directly interested in agriculture as a means of livelihood. When the agricultural societies cooperate with these granges for the holding of institutes, their members are interested in the meetings and induced to attend them. The same is true, of course, where the farmers' club or harvest club secures the interest of the city man.

In closing I would urge again that, desirable as it may be to interest our urban population in the institutes and in agriculture, it should be done only by means that are strictly agricultural, and which are equally for the benefit of the practical farmer, and never to the extent of taking away a meeting or diverting the programme into channels which will be other than beneficial to the farmer and his family.

The following paper by G. T. Powell, of New York, on the same subject, was read by the secretary :

The work of the farmers' institute as at first organized had for its main object the education of farmers who for years had made agriculture their chief pursuit, yet who felt the need of acquiring a broader knowledge than the development of modern times demanded. Instruction was given by those who had had a practical and successful experience along special lines, that the farmers might obtain from such speakers information and suggestions that would be helpful to them along different lines in their work.

At a later period in the development of institute teaching came the demand for greater and more specific information and knowledge on special subjects, when the scientific teacher was called into the work with his fund of scientific knowledge carefully worked out at the experiment station or agricultural college.

At this early stage of farmers' institute work there was in all sections of our country a very steady migration of population from the country to the city. Young men were looking for work that would bring them more ready money than the farm. This migration to so large an extent of the young men and of farm laborers from the country to the town, and the difficulty of obtaining efficient labor, has also caused many of the owners of farms to give up farming, to sell their land, and with their families follow in the general movement to the city.

With the overcrowding of city population, and the consequent competition in all lines of business and in every avenue of work, the possibilities of living in the country, and especially on the cheap land which, in so many sections, may now be obtained, are appealing to many, and a movement back again to the land is now a marked tendency.

This awakening interest in country life is not confined to any one class, but is active with the man of wealth, who longs for broad fields and opportunities to have herds of cattle and flocks of sheep grazing in fresh pastures. The clerk with a moderate salary, who has to meet advancing rents and the increasing cost of city living, with no certainty of holding his place permanently, is thinking of securing a few acres of land with the certainty and the greater permanency which they offer for a home. Many young men in cities begin to see new opportunity through the acquirement of knowledge to become managers for those who desire to make investment in land, and some are taking courses in agricultural colleges preparatory to taking up this line of work.

Among others in the city who are turning their thought to the land are young women, who are buying land and who desire to pursue some special lines of agriculture.

These different classes of city people who are interested to change from the work to which they have been accustomed to one new and untried are seeking information and guidance, and want good general conditions in the property they buy. The purchaser of means and wealth in the city is often the victim of some real estate operator who has succeeded in locating him on unsuitable land sold to him frequently at a fabulous price. After spending several years in hopeless efforts to obtain satisfactory results from the land, and after sinking more or less of a fortune in it in extravagant buildings and otherwise, he sells out at a large sacrifice, and returns to the city with the feeling that life in the country is a failure and not altogether satisfactory.

When the city man determines that he wants to buy land and to build up a country estate, he needs helpful information and advice, first, on how to select land that is suited to the purposes for which he wants it; second, on how to obtain the right management of his place; and, third, on how to get the largest satisfaction from living on the land and to avoid useless extravagance and wasteful expenditures of money which in time become a burden to him.

What may the farmers' institute do to help this movement and tendency to life in the country rather than in the city? As the work of the institute is educational in character, and is dealing with agricultural problems, it may do much by way of stimulating local pride in improving the general conditions in farming communities.

One of the first questions a city man will ask concerning the section where he would buy property is, What kind of roads does it have? He is a lover of good horses and enjoys driving, or he may use an automobile for going to and returning from the station quickly and for making long journeys about the country, and the character of the roads becomes to him an important factor in determining the purchase of land.

We recall an instance where a city man went out to view a farm that is 5 miles from the railroad station. It was in the spring when the frost was coming out of the ground, and the soil was clay. After taking over an hour on the miry and almost impassable road to reach the farm, the gentleman did not even look at it, but directed the driver to turn about and drive him back to the station. The farm had many most excellent features, but its sale was defeated by a bad road leading to it.

Good roads need not necessarily be costly in construction. Many communities have more or less good road material at command, but it is a problem of intelligent expenditure of money and of labor in the construction and maintenance of roads.

The farmers' institute has here an educational field the value and importance of which can not be measured or estimated. Special good-roads institutes could with great profit be held, in which practical demonstration could be made of methods for the construction of good roads and of methods that are best adapted to different conditions of the different sections where institutes are held. Practical demonstration of this character will do more to convince taxpayers and the owners of property of the wisdom of wise and intelligent expenditure of their money for good road construction than any amount of argument and figures that may be presented upon the subject. No one line of improvement will do more to give ready sale to land and make a community desirable and attractive to a city man than to give it a reputation for good roads.

The second problem of large importance to a community that would attract the city buyer is the character of its schools. These are not teaching some subjects that are closely related to the best welfare of the community. Every school should teach something of the soil, that the pupils receiving instruction may gain some knowledge of its constituent elements and of its general requirements; something of the animal life of the locality, of the trees, plants, and insects a knowledge of which is in increasing demand. Important as is the teaching of the English branches, of no less value is instruction given upon subjects that are directly and intimately connected with the daily life and occupation of a large number in the community.

For want of this kind of teaching, and through ignorance of the right care and treatment of the soil, large tracts of farming land have become so depleted in fertility that the owners have been practically dispossessed and disinherited by the soil upon which they were born.

From the lack of knowledge of injurious insects, their life habits, and methods for their control, many valuable trees have been sacrificed and the income from them cut off. The teaching of our public schools should supply the growing citizens of the community with a knowledge of these things.

The farmers' institute may wield a large influence in building up a sentiment for natural-science teaching in our public schools, presenting the subject judiciously to the schools where institutes are held, to boards of education, to superintendents, and teachers. The influence of this cooperative work on the part of the institutes with boards of education would, in many instances, be far-reaching.

When the city buyer gets to the country he immediately wants competent workers in every department—the dairy, the garden, the orchard, and the general care and management of his place. Being unable to obtain these from the community in which he has come to live, he brings his laborers and helpers largely from the city, paying these city prices for the same and often to inexperienced men. This soon changes and unsettles the labor conditions of a community in which the city man, especially of wealth, buys a home, for the farm laborer will not long be satisfied to work by the side of men in the same community who are getting larger pay for less hours of work.

The farmers' institute may help the sentiment of communities to raise the standard of intelligence and efficiency of all the workers in them and thereby meet the requirements of the city purchaser of land in this demand.

The present greatest need of the farmer is that of intelligent laborers. In many sections it has become so difficult to obtain these that many are giving up their farms, as they can not secure their crops or carry on their business in a way to get profits out of it. A most intelligent and successful farmer in New York State who has a herd of 200 cows, very recently said to me that the men he had in his employ were obliged to milk twice the number of cows they ought to on account of the difficulty of getting help, and if one of them dropped out at any time both he and his wife had to go to the stable to assist in the milking. So much uncertainty was constantly before him in connection with the labor upon his farm that he has decided to sell out his dairy, which is one of the best, and rent his land.

A few years ago I found myself in a somewhat embarrassing position under just these circumstances. While taking a dairy census in the town of Borina, in Delaware County, when treasurer of the New York State Dairymen's Association, I was invited by a young farmer and his wife to spend the night at their home, as there were no hotels in town, and this was the custom. After finishing supper, the farmer, looking at the clock, said to his wife: "I guess you and I will have to milk 33 cows to-night, as the men who are away on a holiday have not returned." The farmer started for his cows while his wife went to change her dress and shoes. In the meantime, as a guest, the question arose as to what I ought to do in the case. As the wife appeared in a dairy suit, I asked her if she expected to milk half of those cows, when she replied: "Oh, certainly; I have to do that occasionally." I then said to her: "If you will give me an apron I will help you," and taking off coat, vest, collar, and cuffs, I donned the apron and started for the stable. It was July, but notwithstanding that the temperature in that stable soon ran up to 110° F., apparently, I succeeded in keeping up the pace with the husband and his wife, and milked one-third of the number. For the balance of the week it was the marvel of the town that an accredited professional man, who was taking the dairy census, could milk a cow, and did milk eleven of Supervisor Black's.

The lesson in all this was that this young man and his wife did not look upon the work on their farm as a hardship. They did it not only cheerfully, but with interest. After the milking was done a new Babcock tester was brought out and instruction given in its use, when a lunch was served, after which the young woman and her husband played upon musical instruments, passing an hour most pleasantly.

It is this spirit of interest, earnestness, and zeal in agricultural work by those directly engaged in it that is the great need of our times, and to awaken and to stimulate this where institutes are held is of far more importance and value than the instruction that may be given.

It is a surprise to city men, when purchasing a farm, to discover the lack of interest on the part of farmers in their own work, and the tenacity with which they cling to old, unprofitable, and, in many instances, unsystematic methods.

The city buyer of land would prefer to employ the labor in the community in which he buys. He looks at once to the farmers for one among them to become his manager and direct his general interests, feeling that with his experience he would be more competent than a man he might bring from the city, but he is disappointed in the results, for from the moment a city man buys a farm he begins to read agricultural papers and bulletins, he buys the best books he can

find, written by the best authorities, and as an active and alert business man he obtains information from every source from which he can get it, and soon has a grasp of the general policy he desires carried out in his land interests. He quickly acquires more or less knowledge of the general principles involved in the management of land, and he soon discovers that his farmer foreman or manager does not keep a milk record of his dairy, does not give attention or thought to economical food ration, does not spray his fruit trees; that his fruit is wormy and most unsatisfactory, and, failing in general good management of his place, the man is dismissed and a city man is frequently brought out to the management, who sometimes successfully and satisfactorily works it out, but oftener the result is a most extravagant and ruinous expenditure of money.

The farmers' institute should, in every community where its meetings are held, if possible, discover one young farmer who is interested in his life on the farm. It should capture him, awaken, and stimulate his interest, point out to him the need in his community of an authority on all agricultural subjects, the character and needs of the soil, the best methods for its economical improvement, crops best suited to the locality and climate, transportation, labor, educational and church facilities, and water supply. One young man in every town who is well informed on these points and who could give information and advice to those who are seeking it, would soon find his services in demand and at a value equal to or greater than the returns from his farm.

To such a one the city man could apply for the information he desires in a given locality and for which he has to grope about in much of darkness and uncertainty. By having a representative of this character in different places where institutes are held, the authorities would be in closer touch with the farmers, would better know the needs and progress of the community, and while advancing the general interests of farmers would, at the same time, render invaluable service to the city resident who desires to buy land and enjoy the advantages and pleasures of a country home.

The institute should help farmers to appreciate the value of rural free delivery by giving information on how to obtain the service. It should give information on the cost of telephone construction, the advantage that may be gained by quick communication with business centers, and a daily knowledge of the condition of the markets that may be had in the selling of the products of the farm.

A city resident who is accustomed to these improvements in his business and in his home, learning that they may be had in the country, will seek the sections where they are in use, and hence the institute can render the city purchaser special service by giving information and instruction to farmers along these lines in educating them up to the importance of introducing them in their homes, not only for their own benefit, but so as to add to the market value of their property.

The institute work in its best inception is not confined to the instruction of farmers alone, but should embrace some of the allied interests of agriculture, one of the most prominent of which at the present time is that of the city resident who is turning his interest and attention to the purchase of farming land.

It is not the number of institutes that are held, but rather the quality of the work done that determines their highest usefulness.

The following paper by H. J. Patterson, of Maryland, was read by W. L. Amoss:

HOW CAN THE FARMERS' INSTITUTE AID IN IMPROVING AND INCREASING CROPS.

When we think of increasing and improving crops we generally refer to raising the averages, and how to do this is naturally the question which would come up in this connection, and what part can the farmers' institute take in the work. The average yield of all crops in all parts of the United States is so much below the line which marks good and profitable farming that it is a rare thing to find a man in a farmers' institute audience who will acknowledge that the yields he obtains are nearly as low as the average of the State. This condition would seem to indicate that the farmers' institutes are reaching farmers above the average and that the great mass of those who raise poor crops and whose yields cause such a low average are not being reached directly by the institute.

This thought leads to the conclusion that the farmers' institute must decide which is the quickest and most profitable way of increasing the average crop

production, whether by making better farmers out of those at present in the better class or by improving those in the poorer class.

It is generally conceded that the farmers' institute in its present form and the experiment station bulletins have been appealing to and reaching mainly the better class, and that the work of reaching the others must be through example and on the principle that "a little leaven leaveneth the whole." While this plan of working has been productive of much good, yet it would seem that some more rapid and effective measures could be devised and make it possible for the institute to exert a marked influence on a much larger class of farmers than at present, and also to adopt some plan which would cause their teachings to be put in practice with more certainty. The preaching done at the institute impresses but a small percentage sufficiently to cause them to adopt new methods.

A large part of the best thought that has been presented at institutes has had its source in the investigations of the experiment stations. The results of the work of these institutions are being more and more recognized by the farmers as giving the best that can be obtained, and particularly applicable to local conditions. The ultimate object of the experiment station work is to devise means which will reduce the practice of agriculture to a science and enable farmers to obtain with more certainty increased yields; to lower the cost of production and to grow crops under new conditions in new locations. In other words, this means that the results of experiment station work when properly applied should make farmers increase their profits per acre.

Taking these views of the experiment station work it would seem that the one effective means by which the farmers' institute could improve crop production would be to make their work more and more an extension branch or department of the experiment stations and be the medium which will carry the results obtained directly to the farmers. Agricultural investigations have accumulated a great mass of useful information that should be placed directly in the hands of the people in a clear, conservative, and convincing manner. The farmers' institute should be the agency to do this work and will by doing it take an important step toward meeting the demand for a higher class of matter. In this connection it might not be amiss to call particular attention to the desirability of being conservative in presenting results of agricultural investigations and not to lay claim to things which reason will tell are not corroborated by facts, for surely unwarranted claims in the end will do more harm than good.

Some very effective institute work has been done by having a leader in the community go and visit some farms of repute and tell his fellows of the same at his local institute. This plan, while good, should go further and have a number of farmers, representing as many sections or districts, go and study an intensive system of farming which they can and will adopt with slight modifications. The institute director should aid in adapting the modifications to each local condition and see that the new plans are faithfully carried out, and then hold a local institute on the farm that has successfully used the improved method. This plan would give many living witnesses widely distributed and would exert a powerful influence in increasing crops and reach many of the scoffers at book farming who can not be hired to go to the institute lecture hall. This idea can be elaborated and modified so as to meet a variety of subjects and conditions, and while in a measure it partakes of the nature of a good farming propaganda yet might properly be considered a legitimate class of institute work.

The present form of institute work often presents too many subjects at one time, and also things which can not be applied for several weeks or months, and thus loses much force. To overcome these difficulties and make the work most effective more institutes should be held at a time when the information given out can be immediately put in practice and thus cover only one subject at a time. This feature of the special institute trains is one reason for the effective work they have accomplished. The institute trains are also valuable because they bring the information more nearly to the farmer's door and keep him but a short time from his daily duties in order to receive the message. The information given out by the institute, in order to reach many, will have to be delivered by some of the popular mechanical devices of the day, such as the phonograph and moving-picture machines. These appliances with some people will prove effective and make impressions when all other plans have failed.

The following are some of the many ways in which it seems possible for the farmers' institute to exert a marked influence for increasing and improving agricultural products and the farmers' profits:

(1) By devising efficient means for reaching the farmers who are now producing the poor crops and who cause the average yields to be rated so low.

(2) By inaugurating a system of institutes of the nature of a good farming propaganda which will reach every district, township, or town, and have in each of them a living example of the goal which the majority may reach.

(3) Make the work more effective by presenting but one subject at a time, and doing this at a season when the farmers may make an immediate use of the information given.

(4) Using a greater variety of mediums for giving out information so as to reach all classes.

(5) Making the institute do the extension work of the experiment stations.

Just how these ideas may be put in practice can be better developed by those of you who have charge of the work and have the conditions well in hand.

J. H. Skinner, of Indiana, presented the following paper:

LIVE-STOCK IMPROVEMENT; IN WHAT DIRECTIONS CAN THE FARMERS' INSTITUTE DEVELOP IT?

The subject of live-stock improvement is one of great importance and interest to farmers' institute managers and workers. First, because of the great number of people who are handling live stock, either in a large or small way. No matter where we go, either north or south, the farmer is naturally interested in some class of domestic animals. In some cases it is because of necessity, as they are essential to farm operations. In others it is because of the fact that live stock enables the farmer to turn his raw products into finished products, which will bring him much greater profit in the end. Second, the farmers' institute is naturally interested in live-stock improvement because of the vast sums of money which are invested in various classes of animals in America. It is true the farmers' institute has a broader field than that of mere financial concern, but at the same time those subjects which have a direct bearing on the profits from American farm operations are always of interest to those farmers who give their time to institutes. Third, the farmers' institute is deeply interested in live stock and its improvement because of its importance in maintaining soil fertility and in utilizing the rough feeds and waste products in such a way as to return the greatest profit.

It is difficult to estimate the improvement which the institute has brought about, and yet no one here needs any argument to show that it has accomplished great things. Its influence, great as it may have been, is small as compared with what it may be in the future if advantage is taken of opportunities which present themselves to-day.

Farmers' institutes in the past have dealt with the more general problems of the farm, while in the future their work will be of a more special character. It is my opinion, based on observation, that the people in communities where I have attended meetings, in Indiana, Ohio, and Illinois, want definite instruction, and I believe that before many years have passed the institute in many States will conduct schools of short duration, which will deal with special phases of certain well-defined lines of agriculture, such as soils, crops, live stock, dairying, horticulture, etc. All of these lines have received attention in the past, and no doubt much improvement has resulted. The field is not exhausted, however; it has just been scratched over, as there is still much room for improvement.

Looking over the list of live-stock subjects to be presented for discussion at institutes in different States this winter, I find that they cover a rather limited field as compared with the importance of the industry. Furthermore, I find relatively few workers who, judging by their subjects, may be termed specialists. The subject assigned me is of vital importance to the agriculture of this country. American farmers, as a class, are not stockmen; they lack the stock instinct which is so deep-seated in the minds of the British farmers. They have been busy clearing and draining the land and in the great majority of cases have not given careful attention to the improvement of their stock. There are, however, hundreds of splendid stockmen and thousands of superior pure-bred animals in this country. These stockmen are not all listed among the breeders of pure-bred stock, nor are all of the good animals in the hands of pure-bred stockmen, as many farmers are coming to the realization of the value of a systematic study of the live-stock business. Large farmers and range men especially have recognized the value of good blood and quality to a far greater extent, however, than small farmers. The range men have graded up

their herds from the worst kind of scrubs with pure-bred sires, produced in the Central States, until many of them excel the herds of grade cattle on the average farm in those States. It is the great class of average farmers that the institute may greatly assist, as they need awakening and systematic direction.

There is a crying need among farmers not only for an appreciation of better blood, as well as more intelligent feeding, but a knowledge and recognition of individual excellence in animals. These, in my opinion, are among the most important phases of live-stock improvement that the institute can undertake to develop. They lend themselves to the institute work, and may be presented in such an interesting and striking manner that good results are bound to follow.

Importance of good blood and selection may be emphasized by presenting records of dairy cows, race horses, hens, etc., which are conclusive as to the effect of systematic effort along lines of selection and breeding. Farmers do not recognize the value of patient effort along systematic lines of breeding. There are few communities, and these only where there is no live-stock interest, where the importance and value of the well-bred sire could not be profitably discussed this winter. In my experience this subject seldom fails to bring out questions and discussions which are of the greatest value to those present. The knowledge of individual excellence in animals is, with many farmers, equally as important as the subject of better blood. Selection and breeding are very closely associated. To begin with, every successful breeder must have correct ideals as to type and quality in order to succeed. Many farmers buy animals to feed and far too many buy the unprofitable kind. Is there any reason why the institute should not teach proper ideals in live stock?

Scoring and judging all classes of animals may be taken up in institutes by competent instructors in such a way as to have untold value. This kind of work is always of interest to the breeder of pure-bred stock, and he will be present at meetings where it is part of the programme. The discussion will bring out his experience, which will be of great value to others. We sometimes find our best-informed, practical men timid and unable to talk well, but they forget this when questions and discussions arise, and thus lend valuable assistance to the meeting.

It is also easy to arouse an interest in the average farmer by working on market classes, because he is a producer and anxious to learn how to select good animals and eager for information on market demands and prices. Such work does much to arouse an interest if it is well conducted. It gives definite form to a man's idea and inspires him to study not only his own horse or pig or cow, but his neighbor's as well. He will soon become a student of animal life, and soon you may find him studying the great exhibits at large shows, such as State fairs and internationals and at the sale ring later. The worker should be able to give his audience a clear-cut and definite idea of the most desirable types of animals for breeding, feeding, and dairy purposes. He may go further, pointing out undesirable features and weaknesses in animals as a class or breed. In connection with such work it is thoroughly practicable, in many places, to conduct meat demonstrations along with the scoring and judging of live animals, although conditions will not always warrant this. The district meetings offer splendid opportunities for such work.

Charts and lantern slides showing different types of animals for comparison, supplemented by tables showing figures, bringing out certain features of production, such as cost, market value, profit, dressing weight, shrinkage, etc., in meat animal, should be made a part of the worker's equipment. Live animals before an intelligent audience of farmers are an inspiration to them, as they are something that they have to deal with every day, and nothing can take their place in fixing ideals of type, quality, etc., in the minds of farmers.

Another line of work very closely associated with that of scoring and judging is that of methods of production relating to pork, beef, mutton, horses, milk, eggs, etc. All these lines of work may be taken up by successful, practical men who have given them special attention, although they may be more effectively presented by station workers who are thoroughly informed on both the scientific and practical phases of the work. The worker should call attention to the work of the Department of Agriculture and the experiment stations by quoting portions of bulletins, figures, etc., and giving references to publications bearing upon live stock, thus encouraging farmers to study and read helpful publications.

Many lines of production naturally lend themselves to subdivisions. This is important, it seems to me, as the work can be made more definite. The trouble with many workers may be likened to the old muzzle-loader shotgun; that is, they scatter too much.

The broader and more general phases of a subject may be treated in a general way in the introduction, but the little part well done—that is, put in such concise and definite form as to make it possible for farmers to take it away and apply it—is worth vastly more than the general discussion of the broader subject and all the jokes and stories which too frequently rise to the surface.

In order that a clear idea may be gained of what is meant by subdivision, beef production, for instance, may be treated under the following subjects: "Growing feeders," "Buying feeders," "The use of the self-feeder in beef production," "Winter and summer feeding," "The use of supplemental feeds in beef production," etc.

Methods of producing any class of live stock may be treated from very different standpoints by different individuals. One may prefer to take up breeding of, say, cattle for beef production, discussing the type, breed, season of mating, feeding, care, and management of the females, while another would take up the subject of "feeders," discussing types, quality, age, wintering, etc. Still another may prefer to discuss feeding from the standpoint of getting cattle on feed, length of time to feed, the use of supplements, variety in the rations, finishing cattle, marketing, etc. A single line of work, with the various divisions of the subject as given above, is especially suitable for district or special meetings where different men are available for the discussion. The sanitary care and management of different classes of stock, especially those more subject to contagious disease, such as swine, will result in marked improvement of the surroundings of farm animals. Naturally where the environment of an animal is made more favorable to thrift and vigor, improvement in the stock is the indirect result, while the direct result is the preventing of disease and loss.

Farmers are not well informed on the principles of feeding and laws of nutrition; and while they have a working knowledge of farm feeds, there is the great desire on the part of many to understand more thoroughly the composition, digestibility, and effects of all kinds of foods. Many feed expensive rations involving high-priced foodstuffs and patent stock foods without counting the cost. Institute work of this sort can be done best by some station or college man who is thoroughly familiar with the practice of feeding, as well as the scientific side of the question, although every institute worker who discusses any phase of feeding should be well enough informed to give the farmer some light on the subject. In the South two things are undoubtedly necessary before marked improvement can be made: (1) The farmers must realize the importance of live stock in maintaining soil fertility, and (2) they must be shown the value of better stock.

F. S. White, of Missouri, read the following paper:

COOPERATION IN PURCHASING SUPPLIES AND MARKETING PRODUCTS.

The subject assigned to me is very broad indeed, and one very difficult to treat, as it covers such a wide range of thought. It appears to me to be an educational problem. This being true, it seems that the whole matter of cooperation must start in educating the farmer to feel the need of assistance. The average farmer, according to my observation and experience in institute work, needs yet to be taught that it is only in or through education that he can ever protect his own interest. Here is where most of the farmers' organizations in this country have failed. They commence at the bottom of the ladder to build and try to climb up by pulling some one else down. They should be brought to understand that no illiterate man or body of ignorant men was ever capable of protecting and promoting their best interests, and that individual intelligence is the first step toward securing self-protection, and that the farmers' institute is the best medium now offered for distributing such information as will lead to protection and prosperity. Nearly all educational movements are slow. It requires time to work out great problems and secure results. This is particularly true as regards educating farmers along lines that will promote their best interests. It has been found almost impossible to bring a certain class of our farmers to realize that it is only through organization, cooperation,

and education that they will ever be able to secure proper reward for their labor.

This brings us face to face with another serious problem which always has handicapped the farmers' institute in its work, and still continues to do so, and that is the prejudice which farmers hold against what they call book farming. It is a lamentable fact, nevertheless a true one, that we still have in this country of ours a class of farmers who are not at all in sympathy with agricultural education, or what they term "book farming." This class of farmers look with suspicion and distrust upon every movement which offers them any assistance. In their illiteracy they question the motives of the institute and hesitate in accepting the relief which it may have to offer. The farmer has some grounds or at least excuse for this prejudice. He has been deceived and imposed upon so often that he has come to lose confidence in himself, in everyone else, and in almost everything. This condition of mind takes us back to the question of education, for if the farmer were educated to the point where he would be able to discern for himself between that which is for his best interests and that which is not, his suspicions and prejudices would be largely removed. What is meant by this kind of education is that when a farmer is approached with any kind of a proposition, he should be so well informed as to be able to know whether or not such a proposition is for his best interests.

Again, the farmer should be so well informed as to be able to discern at once whether a speaker who is giving advice knows whereof he speaks and whether the advice is likely to be of any benefit to him or not. The question of removing prejudice from the mind of the farmer is a hard one. If the farmers' institute wishes to gain and hold the confidence of the farmer, it must keep clear of everything that is of a trade, advertising, or political tendency. The work of the institute should be of a strictly educational character, and it can not be too careful in its selection of teachers for its work. An unwise selection of speakers is one of the causes of the prejudice existing against the work, and this one thing has probably done more to retard the influence of the institute than any other. There are many fads to-day in agricultural teaching. Much of that which we find in print on various agricultural and horticultural processes is not worth the paper it is printed on. While the average farmer may be dull in many things pertaining to his best interests, it is not safe to presume too much on his ignorance, for many are shrewder thinkers than they are actors. As a rule they are pretty fair judges of human nature and have the faculty of sizing up the man who undertakes to talk to them. The only safe method is to make sure that the lecturer is qualified to give instruction and is able to present his thoughts in a forcible and agreeable way.

Qualities which gain and hold the esteem and confidence of the farmer are honesty, fair dealing, and truthful and conservative statements. After the institute has won the confidence of the farmer, then the work of education may commence, and it is a good plan to have as many representative farmers in every community as possible to assist in this educational work. Here again we must use judgment and use as teachers only such farmers as are beyond reproach and are making a success in the line of farming they are undertaking. Whenever a farmer who has made a failure in his business attempts to teach others how to farm, he casts a damper on the work of the institute and brings the institute into disrepute.

Another thing necessary in attempting to cooperate with the farmer along any line is that the institute must become acquainted with conditions and needs of the farmers whom it expects to assist. The conditions vary so greatly that a line of teaching that would benefit one community may not be worth anything in another. This is shown in the work in which I am engaged. Frequently when our educational car reaches a town we find several hundred people waiting for us, and there is no trouble in having a good meeting. At the next town, possibly only a dozen miles away, we are unable to rally half a dozen farmers. These two sections need different treatment. In the first case there is usually some good farmer or business man who takes an interest in everything that benefits his community. In the other no one seems to have any interest in himself or the country at large.

In making the conditions of the farmer a study, I have found that where diversification and rotation of crops are understood and practiced the farmer engaged in this kind of farming feels the need of help—is anxious for information. He is usually a man with whom we can exchange ideas and is capable of appreciating efforts made in his behalf. Such farmers are usually cash buyers. They have something to sell almost every week in the year, and consequently have

cash to pay for what they need. This class of farmers understand the value of money and its purchasing power, and, as a rule, they want the most that they can get for their money. When farmers are educated up to this cash standard of living the farmers' institute will have no trouble in securing their cooperation in any legitimate proposition which promises advantage or profit or which will enable them to save a dollar or increase its purchasing power. Here is a great field for educational work.

There is another class of farmers the opposite of the one just mentioned. I refer to the class of farmers that persist in clinging to the one-crop idea and who buy all their supplies on credit. Such farmers, instead of becoming independent, are as a rule dependent. The pernicious system of buying on credit or on the cutthroat mortgage system, practiced in many sections of our country, causes the farmer to lose confidence in himself and in everyone else. It destroys his independence, causes him to become a hard liver, a poor provider for his family, and as a rule a very poor citizen in general. Such farmers are content with a bare, miserable existence and are willing to stop at that boundary line. The farmers' institute, in attempting to cooperate with this class of farmers along any line of improvement, must commence with primary teaching, much as a teacher starting a child in a kindergarten school. The question, How are we best to reach this class of farmers in our educational work? I shall not attempt to answer. It is a problem as yet unsolved, at least by me.

The credit system goes further. It makes a man indolent and shiftless. The farmer who makes a practice of buying all that he gets on credit is usually shrewd enough to reason that the merchant who is carrying him has an interest in him and at all events is not going to permit him to starve. He reasons that the merchant is compelled to care for him in order to get what he owes him and at the end of a year, if he fails to pay out, that the merchant will carry him through next year.

The farmer who buys on credit is, if allowed by the merchant, a reckless buyer and will purchase things which he could get along very well without. As a rule such buyers care very little about the price of an article. If it can be had on credit it is cheap enough.

It is difficult to say how the farmers' institute can cooperate with this class of farmers. If we can make them cash buyers, by showing them that in this country there is a ready market at their door for almost everything that they can produce, that it is possible for them to have something to sell at all seasons of the year, that the system of diversified farming will enable them to have some money coming in all of the time, and that it is the man with the cash who always buys cheapest, then we will have succeeded in enlisting their cooperation in all that promises relief or profit. Our only hope for securing this lies along the lines of education, and the best thing for the institute to do is to press its educational work as fast as circumstances will permit. Unless we are of lasting benefit to farmers from an educational standpoint, our mission as an institute and as institute workers is a failure.

The heading of this topic may lead some to think that what is intended is to point out some practical way or plan whereby farmers may purchase their supplies in a body or as an organization. In my opinion we are not ready for this, and, owing to the present disorganized condition of the farmers, such a thing is neither practicable nor advisable. As far as my observation and experience go all such efforts have proven miserable failures in the past. The farmer, as well as every other good citizen, should be willing to pay the merchant a fair price with a reasonable profit on his goods; and I believe that if we, as institute workers, can only succeed in educating the farmer to a strictly cash system, he will have no trouble in finding merchants who are willing to sell him goods on a very close margin and who will treat him fairly. The institute would do well to assist the farmer by showing him how and where to buy. If there are any two articles above others in which farmers are most shamefully imposed upon in purchasing it is in seeds and fertilizers. The institute could show that it is the poorest sort of economy for the farmer to buy cheap seed and low-grade fertilizers.

As to the second part of the subject, that of marketing farm products: If we can succeed in teaching farmers how to grow better crops, the marketing of the products will, in most cases, take care of itself. The class of nonproducers is increasing so much faster than the producing class that there is a growing demand for every first-class farm product that can be grown. There never was a time in the history of the world when the farmer was paid so well for every

intelligent effort put forth on the farm as he is to-day. We should, however, remember that it is "intelligent" effort.

Our population is increasing rapidly. It will only be a few years at the present rate of growth until we will have 200,000,000 people in this country. We are becoming large consumers of the annual output of our farms, and the great export trade of the past and present will, within a few years, be largely a matter of history. Our forests and our mines, from which a large part of our export trade has come, are fast becoming depleted, and soon the great revenue derived from them will have to be supplemented by or from other sources, and the only thing in sight to keep up our revenues is agriculture. From an agricultural standpoint we are to become the greatest producing power in the world. When this occurs we will need all the products of our mines and forests for use in the manufacture of farm implements and other supplies for our own people. The products of our factories and our farms will soon all be needed for supplying the wants of our people at home.

This suggests another line of educational work for the institute which lies in teaching the great importance of soil fertility and the maintenance of this fertility. This we should be more concerned about than any other proposition now before us. If the millions who are to follow us are to be fed, the fertility of our soil must be kept up to its highest producing power. The institute must educate the farmer, teaching him not only how to make a comfortable living for himself and family, and lay by a little each year for a rainy day, but also how to farm so as to leave his farm when he is through with it in a higher state of fertility than when he began to farm it.

The following paper bearing upon the same subject, by Stanley H. Watson, of Texas, was forwarded to the secretary after the adjournment of the convention:

SELLING TEXAS TRUCK.

Whether a person succeeds or fails in truck growing depends not upon the intelligence of the individual in question entirely, but upon the average degree of intelligence in his community. If the people in a community are sensible enough to organize and market the products of the truck farm intelligently, they will succeed; unless they do this they will fail. In Texas it is no longer a question of producing, but entirely one of successfully disposing of that which is produced. Our experiment station, assisted by specialists from the United States Department of Agriculture, has succeeded in solving nearly all of the problems of production that were not solved by the growers themselves, and exact information concerning the proper method of producing any crop can be had for the asking. There is no longer the slightest excuse for crop failures from any other cause than unfavorable weather conditions. The question of selling the product of the truck farm is one that has not yet been answered to the entire satisfaction of the growers.

In considering the problem of how best to market the products of the truck farm the first lesson the grower must learn is that the consumers at the other end of the line are entitled to every consideration; that they are just plain folks who, when they give their money to the dealer, want its equivalent in fresh, clean stock. They do not want to pay their money for badly packed, poorly assorted, underripe, or overripe vegetables. And just as soon as they find that the stuff coming from any community is carelessly handled and dishonestly packed they are going to quit buying it; the retail merchant will no longer buy it from the commission merchant or wholesale produce dealer, and the shipper will get hard-luck stories instead of nice account sales and substantial checks. Shippers of vegetables are too much inclined to lay all the blame for their failure upon the other fellow, and too often use a telescope hunting for their troubles when they could see them with the naked eye if they were not blinded by ignorance or prejudice. Of course it is very consoling to lay the blame upon the commission merchant, thus clearing ourselves from the charge of carelessness and, in some cases, dishonesty. A good rule would be for the shipper to determine that he would not offer for sale that which he would not be willing to buy.

When the shipper has digested the above features and has determined to put up good, clean stock, properly graded and packed, he has taken the first and most important step in the successful solution of the market problem, but it does not end there. It is only the very early and high-priced product of the truck farm that can be profitably shipped in less than carload lots. The difference between

the transportation rate by express and the transportation rate in carload lots by freight will make a very handsome profit of itself. Very few truck farmers in this State grow stuff in sufficient quantity to ship carload lots. In order to secure the advantages of carload rates each community should have an organization to cooperate in marketing its truck crop, thus putting the small producer in position to do a wholesale business.

A truck-growers' association, in order to be successful, must be organized as a business institution. It should be incorporated with a capital stock sufficient to make it financially responsible for the contracts it may enter into. Following the principle of giving full value for every dollar received, a truck-growers' association that is known to be financially responsible for its contracts and managed by people whose standing for business integrity is above question, can always make truck sales at good prices if any demand exists for that which they offer to the trade. A wholesale produce dealer does not care to purchase stock of this character from irresponsible people unless he has a representative on the ground to inspect the stock before it moves. But if they know the people with whom they are doing business are good, both morally and legally, they are willing to buy without seeing the stock.

In organizing a truck-growers' association due care should be used in the selection of people who will administer its affairs, and it should be borne in mind that patriots willing to serve their country without compensation are few and far between, and usually persons make such propositions expecting to get something somewhere sometime. Therefore, it is wise to know just what they are going to get to start with and to pay the employees of the association reasonable wages for the service rendered. It will pay an association well to hire the best man that can be had.

A step further in working out the market problem would be, after each community had perfected its local organization, to have an association of organizations for the purpose of avoiding overstocked markets and to bring about the proper distribution of products of various communities. Several attempts have been made in Texas to do this, but so far none of them have succeeded, and the result is needless competition and frequent glutted markets. However, when one considers that the truck crop of Texas is produced by some 40,000 people, each one having more or less original ideas about marketing that crop, the difficulty of bringing about such an organization will be understood. It is within the limits of the possible that an effective State organization will some day materialize. In the meantime, however, any community by exercising an ordinary amount of plain, common sense can make a success of truck growing.

The session then adjourned to visit a sugar factory near Baton Rouge during the afternoon, and to meet at 8 p. m.

EVENING SESSION, NOVEMBER 13, 1906.

The meeting was called to order at 8 p. m., President G. C. Creelman in the chair.

IMPROVEMENT OF COUNTY FAIRS; THE IDEAL COUNTY FAIR AND THE MEANS BY WHICH THE INSTITUTE MAY AID IN SECURING IT.

G. A. PUTNAM, of Ontario. This is a subject which should, I suppose, have been dealt with by a paper, but the conditions surrounding the fairs in the States and in the Dominion of Canada are so diverse that I have thought it better to simply present a few general principles which are essential in successfully working out a fair, rather than to give you in a paper a summary of what has been done in different places, and deducing therefrom what I think is the best system.

The primary object of the agricultural society, so far as Ontario and the other provinces of Canada are concerned, was educational, and for many years appropriations for agricultural purposes were entirely through the agricultural society. Unfortunately the society failed to do anything. Some twenty years ago the farmers' institutes took up the educational side of agriculture. It

was found necessary to create an entirely new organization—the institute—because the fairs did not do the work that they were primarily organized to do. The educational work which they did carry on consisted almost entirely of exhibits of agricultural products, and as was the case in all fairs, they offered prizes for the best products. Those who got prizes went home well pleased and those who did not get prizes were displeased. No person knew why the prize was given to this or that class.

I think the educational side should be taken up in connection with the exhibits, and the rules should provide full opportunity for the most careful inspection of each exhibit and require that every judge shall be prepared to give to the exhibitor, or to any other person interested, definite reasons for his judgment of the award, so that they may know precisely why a certain class was given the prize over another class.

One of the reasons for the success of the fair work in Ontario has been that the prizes have been based on a definite plan, or at least they are now. About two years ago we reorganized the basis on which prizes were to be awarded. Appropriations are now distributed to the fair associations according to the work that they do on agricultural lines. If, for example, an association devotes one-half of its funds to horse racing, two-thirds to special attractions, and leaves one-eighth for agriculture purposes, that association can not expect to receive the same recognition at the hands of the department in the way of appropriations as if it offered three-fourths for agricultural purposes.

The topic of discussion is, "How can the farmers' institute aid in securing the improvement in the county fair?" Whether the agricultural society gets assistance from the agricultural department, or whether it does not, in either case the farmers' institute should assist the society, and the first essential is to see that the fair associations have representative farmers upon the boards of directors, and when you have secured this, then they should assist the board in getting out a prize list that will be along educational lines. The institutes in our provinces have assisted the fairs by offering special in addition to the regular prizes—for instance, they will offer special additional prizes for skill in corn growing or in seed selection. The institute officers should see to it that the judges of the exhibits are prepared to state the special features which distinguish one exhibit from some other of its class, and thus promote the educational feature of the fair. If any visitor comes along and asks questions, the officer making the award will have to explain to him why the article has been given the first prize. Another commendable feature is the offering of prizes to children. When you get the children interested in growing corn or grain through the summer, they of course will want to go to the fair, and they will take the father or mother with them. Thus the fair is benefited through the children being interested in a personal way by prizes awarded for the work they have done.

As was stated yesterday in one of the discussions, we have an Experiment Union in Ontario which has forty-five hundred farmers carrying out experiments in grain growing, the use of fertilizers, growing grasses, etc. It nearly always happens that some of these experiments are near where some of these fairs are held. When fair day comes they usually have these plats in such a shape that they can be used as illustration lessons to those who are attending the fair.

The judging of stock in past years has been done in a rather haphazard way. Usually a local man did the judging. This caused much dissatisfaction on the part of the exhibitors. You could not get men to bring out fine stock because they feared that local jealousies would affect the judges. So we adopted the plan of sending out a man from the department of agriculture. The society

was charged with the cost of the service of that man—not to cover the whole cost, but only services during the time he was at work.

These judges went to fairs prepared to give to the exhibitors and farmers lessons in the judging of live stock. If an exhibitor took exception to the ruling as made by the judge he had the liberty of asking why he placed a premium where he did, and the judge was always prepared to give his reason. In ninety-nine out of a hundred cases his reasons were satisfactory, and through these explanations great educational benefits resulted.

A specific case occurred this year. A farmer from another section brought his stock to the fair. When the stock was judged this man failed to get an award. He went to the judge and asked him why his stock had not received a prize, and the judge explained the whole matter to him. When the fair was over the exhibitor said that he had learned more about stock at that fair than he had learned altogether in the last fifteen years. It had been more valuable to him to be able to take up the question of stock judging in a systematic manner than had been all of the fairs he had attended for the twenty years previous.

I know that much I might say would not be applicable in your Southern States. Since coming to this convention I have had conversation with some of the gentlemen from these States, and I shall be interested in hearing the subject discussed by representatives of these States, since the conditions which exist in Canada do not apply here.

The following paper on the same subject was presented by T. L. Calvert, of Ohio. I have been requested to say something relative to "The improvement of county fairs; the ideal county fair, and the means by which the institute may aid in securing it."

Agricultural fairs have exerted a wonderful influence in the industrial development of this country; they are milestones on the highway of our progress. The requirements of to-day are more exacting than those of yesterday, and in consequence the standards of excellence are raised year by year. The public demands the best and most varied exhibits in all departments, and to secure these requires the most thoughtful consideration and careful management, and the question, "How can the county fair be improved?" is a serious one to the officials of every county fair.

I believe the first step in this direction is to see that the board of managers is composed of honest, intelligent, enterprising, successful business men—men who have the courage of their convictions and will perform the duties of the office without fear or favor. They should be selected because of their special fitness for the work and not as a compliment to an individual or to please any particular section of the county. The members of the board must act in harmony; this is absolutely necessary to success; bickering and quarreling mean defeat and disaster—"a house divided against itself" always indicates a dangerous condition. Active, efficient officers should be selected.

But the whole burden of this work should not rest on the officers of a society. Every member of the association, whether in town or country, has a duty to perform; he must share the financial burden and aid in every way possible to make the fair a success; there should be no shirks, no idlers. In every important undertaking there are always a few who shoulder the heavy responsibility and perform much of the hard labor; this is not as it should be. There must be leaders in every successful enterprise, but the actual work should be more evenly distributed and each individual should bear his share like a good soldier. This would give each one a personal interest in the fair, which would be a great gain.

The board should secure the services of honest, competent judges; men who are specialists in their lines and who will place premiums where they belong,

and, if necessary, give their reasons for so doing, in this way making it educational for the people. Any man is likely to see superior merit in an animal or article which others may fail to detect, and in order to convince that exhibitor of his error it is, I believe, a good plan for the judge to give his reasons for making such decision. A man who is unable to do this is not, in my opinion, capable of passing judgment on any exhibit.

Every farm and every home should have an exhibit in some department of the fair. The farmer's relation to the fair should appeal to his pride as well as to his interest, for a display of fine live stock or choice farm products proves that that farmer is in the front rank in this great forward movement.

Too many fair managers, in their desire to get money from the sale of privileges, lose sight of the injustice they are doing to their community, especially to the children, in allowing vulgar and immoral shows on the ground. Permit nothing there that you would not be perfectly willing your wife and children should see and be benefited by so doing, and you will hear but little criticism.

I believe that a special department for the exhibition of school work will do more to elevate a fair and make it a success than any other one thing. The teacher can show what has been accomplished by his energy and intelligence in developing the minds of his pupils. The premium list should be arranged to include, for competition, all the schools in the county. Instead of offering money prizes offer choice books; these will be much more highly prized than their value in money. They will not only be appreciated for the information they contain, but they will always be valued because they were received as a reward for good work.

Do we not think as much of our boys and girls as we do of our stock? Should not our children have the first consideration in arranging the premium list? If a boy or girl has a single specimen of work on exhibition, will not that be the best means of securing the attendance of all his relatives at the fair? There is no better way of advertising your fair than through the children, for where their interests are there you will find the parents.

It is an incentive to good work to the teacher. It arouses competition, and the teacher who knows the work of his school will be inspected by the public and compared with the work of other schools, will do his best without being told, and it smokes out the worthless teacher whose only object is to kill time and draw his salary.

The chief object of every fair should be to instruct, and if it fails in doing this it deserves to be a financial failure. If a fair is conducted for the sole purpose of making money, it deserves to fail, and its failure is a proof of the good judgment and morality of the people to whom the mismanagers look for support.

It is safe to say that most of the 42,174 farm implements and improvements that have been patented have been introduced to the world through our agricultural fairs, and the county fair has done a good share of this work. Here the manufacturer gives ocular demonstration of the work of his improved machinery, and the farmer is thus enabled to make intelligent selection of implements best suited to his necessities. The merchant has abundant opportunities to make acquaintances and advertise his goods. Farmers have an opportunity of exchanging ideas in regard to different methods of cultivation, the best seed to use, etc. No one should be afraid to ask questions; the few who refuse to answer them are not agriculturists in the true sense of the term, but simply hangers-on, who gather exhibits for the sole purpose of securing premiums.

Every exhibitor, whether farmer, stock breeder, or horticulturist, should attend the fair, and he should go not only with open eyes, but also with open

mind. A man may think his stock or his grain excels all others, but by comparing them with other exhibits he will see where improvements can be made; this leads to more study and better work.

"The ideal county fair" will stand for truth and honesty and will be above everything else educational. It will be a great public lesson, the value of which will lie in its completeness. It will give a practical illustration of the results attained through improved methods of farming by careful tilling of the soil and the utilization of the best machinery, the careful selection of seed, and the breeding of improved live stock; it will add new interest to work along these lines and give a fresh impetus to study; it will emphasize the importance of "raising the standard" in every department of the work of the farm and incite to greater effort. Through its influence the "scrub" farmer and the "scrub" breeder will soon be things of the past. The highest development of type and the greatest improvement in quality of stock of all kinds will be seen there. New ideas and new methods will be given careful consideration, and if labor will be lightened or production increased thereby they will be given every encouragement. The best business methods will be employed there and a healthy ambition to excel will be encouraged by every legitimate means.

No gambling devices or intoxicating liquors will be allowed on or near the grounds; nothing will be admitted which will lower the dignity of the management or offend the moral perceptions of those who attend. No obligations will be assumed that are beyond the resources of the society. Every exhibitor will attend the fair not only with open eyes, but also with an open mind.

Well arranged and properly conducted amusement features will be provided, and things fresh and new in the world of science will be brought to the attention of the young people in an interesting and attractive way.

You will see here the farmer and his family, the horticulturist and the gardener, the horseman and the stockman, the manufacturer and the mechanic, the teacher and pupil, all contributing to the success of the fair and each one gaining information which will enable him to do better work. The object of every visitor and every exhibitor at this "ideal county fair" will be to give as well as to receive.

"By what means can the institute aid in securing the ideal county fair?"

It is not quite clear to my mind how the institute can aid, directly, in securing the "ideal county fair." But, indirectly, that is a part of its mission, and I believe it is fulfilling it. The institute is doing valuable work for the farmer. His standard of excellence is much higher than it was a few years ago and is gradually rising. Competition at the fairs has had some effect in securing this result, but, in my opinion, the talks of intelligent, practical agriculturists, stock breeders, horticulturists, etc., at the institutes, and the discussions which follow, have had a much greater influence, and I believe through the working of this leaven, we will in time reach the "ideal county fair," which is, after all, the "improved county fair."

JAMES MURRAY, of Saskatchewan. Our Province of Saskatchewan is very new. We have the advantage of having been organized recently, and thereby have gained something through the experience of those who have been working longer than we. Our fair organizations and our institute organizations are generally identical. The way we have of conducting them is quite different from that of most of the States and other provinces. Immediately after the holding of the fairs the institute comes along as a part of the same organization, one set of officers in control of both; the same president, the same secretary and treasurer have charge of the county fairs and the farmers' institutes.

We hold fairs about every 20 miles along our lines of railway, and the

membership is all the way from 50 to 400 practical farmers. In that way, where we have the same organization for both fairs and institutes, we get a very much larger membership for the institute, and one membership fee covers both lines of work. All of our clubs do not hold fairs, and when they do not they hold an institute instead, and they have considerable funds to devote to this purpose.

It has been said that the main object of the fair is educational. You can readily see how much easier the educational feature can be promoted under this system. We supply the judges free for the live-stock classes, and very often also for the better classes of poultry. This is a special grant to the society in the country. It costs the department considerable; but we think the gain in education is sufficient compensation to the department for the expenditure of the money involved. We have, of course, in our province more interest in grain and seed growing than anything else; but we have found that one of the best means of promoting interest in improved seed growing is to separate the fair into two parts. We hold one in the summer and the other in the winter. We have fairs in January or February, which we call seed fairs. To these we supply judges. We have from 40 to 50 samples of wheat. These will represent probably 50,000 bushels of wheat of the same quality offered for sale. After the judge awards a prize he explains exactly why the first-prize sample is better than the second-prize sample. Anyone who is not satisfied with the award can have it explained and the reason given why his particular sample did not get a prize. We find this an excellent way to get improvement along seed lines.

Another system that we have introduced, and that is very good farmers' institute work, is to offer a prize for grain fields of 10 or 20 acres. We get a number of the farmers to come together and learn from the judge exactly why a particular field got a little better score than another, and in that way they become better judges themselves. We pay for stock judging, grain judging, and feed judging.

We also draw a very strict line on the so-called attractions. If a representative of the department reports that the fair association admitted shows of an immoral nature the department will cut off absolutely all grants for that year.

We have also introduced during the last two years features at the fairs that are in the line of women's institutes—that is, domestic-science demonstrations, demonstrations in dairying, running of cream separators, making butter, etc., which we have found to very greatly interest both the women and men.

W. L. Amoss, of Maryland. I want to hear from the Southern and Eastern States on this subject. I have been engaged in fair work for a good many years, as a member of the committee to look after the amusements, the gambling, and the immoral shows. Last year the director of our experiment station asked me to take charge of making an exhibit of some of his work at the experiment station at the fair, and I undertook it.

When I assumed this work for the experiment station, I realized that the managers of the fair were anxious to instruct the people; at the same time that they must meet their expenses. It was clear to me that if we of the experiment stations were to help the fair managers we must try and take the place of the fake shows and at the same time entertain the people and instruct them. This was not an easy proposition. I had seen at St. Louis what the Nebraska people did with their stereopticon. They entertained a million people or more, and I suppose they did it fairly well. In considering what had best be done I thought that instead of exhibiting the station products themselves we might exhibit pictures of them.

So we bought a tent and fixed up a stereopticon, and we arranged to make the people who came comfortable. We checked their baggage, gave them a good seat, and made the interior as homelike as possible. We found that the

dark tent was objectionable. The people did not want to go into it, and they did not seem to care to stay for the lectures.

This last season we adopted another method. To take professors away from the college and station to lecture added materially to the cost, and often when one man was sent the farmers wanted to hear somebody else. So we concluded to try the phonograph. We thought that by introducing a talking machine we would probably be able to present lectures that would suit those who came. So we added a phonograph to our equipment. We had a number of lectures prepared for using on this machine. We bought the best phonograph made. It says just what you want it to say, and often talks more distinctly than the man himself. Then we put in some national airs to give variety. We would put on, for instance, a lecture of perhaps a thousand words, on the San José scale. Now, a thousand words are enough. You simply want the facts in regard to the San José scale. After we had finished we would put on My Maryland, then followed that up with What Baltimore City Wants in its Milk Supply and then you put on the Star Spangled Banner, followed by How the Farmer Can Meet the Question of What is Needed in the Milk Supply. After the phonograph has got through with these addresses and songs, start up your stereopticon, and have some expert from the college give short talks on seed corn, improved live stock, or some other topic.

This is some of the work that we are doing, and we feel very much encouraged in it. We are getting a good many people to come to the lectures who had never attended before.

I believe, also, that photographs in institute work may be used to advantage in keeping attention and teaching truth. Whether the photograph can take the place of the stereopticon is a problem. It is necessary to have large pictures. We are endeavoring to do away with the stereopticon by using photographs instead. We have had the photographs made 20 by 22, and then these are colored and used as exhibits. I believe the future plan will be to do away with the stereopticon and use photographs as subject topics.

J. L. ELLSWORTH, of Massachusetts. We think we have some good fairs in Massachusetts. There are a few of the county fairs where we have stopped having the horse races. They do have some fakers, but there is no gambling. That is not allowed in Massachusetts, and it is also a strictly temperance State. In Massachusetts all societies that are under the board of agriculture are required to furnish expert judges, and they are supposed to be experienced and to award prizes where they belong. Each society that is connected with the county fairs is allowed \$600 by the State. That money is applied to paying premiums for animal or agricultural products. None of it is expended for horse racing or for any other amusement feature.

We are trying in Massachusetts to stick to the educational feature. Every fair that draws \$600 from the State is pledged to hold three institutes during that year, and the secretary of the board of agriculture cooperates with the president of the fair association in this work. This explains why Massachusetts can hold a great many institutes for a small amount of money. The agricultural societies and the institutes work together.

W. A. HENRY, of Wisconsin. Our agricultural societies are endeavoring to educate our people in regard to the dangers of bovine tuberculosis. We brought to our State fair grounds a number of diseased cows, and announced that they would be on exhibition, and asked all the people to come and look at them, as they were going to be slaughtered there.

Some of these cows were in high fever, bright eyes, and had all the symptoms of disease. At a certain announced time they were slaughtered, cut open, and often great puss cavities were found in their lungs. These were shown to

the audience, and thousands of people saw them and wondered whether they wanted to drink milk from such cows as that. We are beginning to think that we shall be able to eradicate bovine tuberculosis from our State through sentiment created in this way.

W. C. LATTA, of Indiana. We have been doing some institute and also some demonstration work at our State fair for the last two years. In the way of institute work proper we have been supplied with a lecturer from the college faculty, and we have given illustrations on such lines as milk testing, butter making, use of the spraying machine, the Babcock test, and similar lines.

TAIT BUTLER, of North Carolina. I have not very much to say regarding the fairs of North Carolina. The condition there is exactly that which exists, as I have observed, in all Southern States. In the fairs of the Central West I have found that the paramount idea seems to be education, whereas with us the dominant motive is entertainment. We have no trouble in finding men to make the exhibits, but we find the chief attraction at the fairs to be the race horses and the shows. The people of our State have not come to look upon the State fair as an educational institution. They do not regard the holding of fairs as the State's work. The State government does not appropriate 1 cent for it. I don't know how we are going to get around the difficulty.

A. P. SANDLES, of Ohio. In Ohio we think we have some splendid fairs, as good, perhaps, as any other State in the Union. Our State board of agriculture is aiming to aid both the institutes and the fairs, and I believe the two ought to work together. President McKinley at the Buffalo Exposition in his last speech said that "fairs and expositions are the timepieces that mark the progress of nations."

If that is good doctrine we ought to apply it in our institutes and go back home and start to work on the county fairs. There we can see what we are doing. It is my opinion that the institutes should be made a part of the fairs and the fairs a part of the institutes. In my own county fair we have horse races and other attractions. I will say right here that you have got to have instruction and entertainment features to make a fair a success. Our agricultural experiment station sent a carload of exhibits to our county fair last year. That exhibit did more to show what was going on in agricultural investigation than all of our farmers' institutes have ever done. It was a wonderful show. There were great crowds about it and they were interested in it. There are many people in our State who have never seen a milking machine. We had one there and demonstrated its use. We also had the wireless telegraph. In front of our grandstand we have our special amusement features of tumbling and juggling. We get the best performers we can for this and the people seem to enjoy the exhibition.

The county fair has its social side, which ought to be developed. Old friends meet there and talk over old times. This is one of its most valuable features.

J. N. Harper, of South Carolina, read the following paper:

THE FARM HOME; ITS LOCATION, BUILDINGS, CONVENIENCES, AND BEAUTIFICATION, AND THE RESPONSIBILITY OF THE INSTITUTE FOR THE CONTINUANCE OF THE INCONVENIENT AND UNSIGHTLY HOMES.

As this is such a broad subject I am going to modify it somewhat by confining my discussion entirely to southern rural homes. Some one has truly said that we measure the civilization of a people by the homes they build. The cultured people of the old South showed both refinement and a high stage of civilization by their classic homes. The old antebellum and colonial homes scattered through the Southland have been a theme for both song and legend, and have lent their enchantment as a fitting background to many a beautiful romance.

In these old homes were fostered all that is beautiful, chivalrous, and noble, but with the passing of these old houses the old order of things has passed away forever. We of the new South have already begun to adjust ourselves to a new civilization that will far surpass that of our forefathers. The old colonial houses were the exception rather than the rule. The great majority of the homes were the old-fashioned plantation houses usually two stories high with wing and two to four rooms upstairs, with wide hall both upstairs and down. These old houses usually had a wide porch running the full length of the house. The upper stories of these houses were usually low and the windows small. A great many of these houses were built of logs, weatherboarded on the outside and plastered on the inside. The real essence of these old homes was their surroundings. Most of them sat upon a hill or promontory, and were shaded with live oak, magnollas, cedars, Spanish mulberry, umbrella China berry trees, and a number of species of oaks and hickories. Most of them contained large front yards surrounded by a picket fence, separated from a large backyard which was fenced in in the same manner. These fences were usually whitewashed during the early spring, and in these front yards grew many shrubs and annual blooming flowers. The most predominant flowers were the narcissus, jonquils, roses, and violets. The crepe myrtle was everywhere in evidence. The front yard was usually divided by very broad brick walks running from the steps to the front gate, which was located directly in front of the house. The annual flowers usually grew in beds of different geometrical shapes, and these beds were very often bordered by bottles or by diamond-shaped bricks. The walks and the beds, and most of the space not occupied by flowers, were kept free from weeds and grass and were swept once or twice a week. While these old places were not beautiful according to modern taste, yet they had a home-like appearance. Most of these old houses were heated by large fireplaces, and there was absolutely no provision made for ventilation, except through the small windows.

The architecture of these houses was such that it did not permit the kitchen to be attached to the house. Most of the kitchens were built some distance from the house.

Many of these old homes can be made beautiful by modernizing them, and it should be the province of our institutes to be able to give information of this kind. These old houses, by a few inexpensive changes, can be made both comfortable and attractive. One should begin on the outside by cutting vistas through the woods and by building a good road up to the house. The high fences can be done away with, so can the flower beds and straight walks. Instead of the high fences, if a fence is needed at all, a wire fence will answer. The yard, instead of being broken up like a checkerboard with walks and flower beds, can be sown down in grass. We have many grasses that grow luxuriantly in the South. If the yard is not too shady Bermuda grass makes a beautiful lawn, also Italian rye grass and Texas bluegrass. If the yard is shaded, with a little care Kentucky bluegrass can be made to grow most luxuriantly. I have seen beautiful lawns of this grass in a number of localities in almost every State in the South. In place of the straight walk a well macadamized curved walk or driveway can be had. The shrubbery should be placed as a background to the front yard next to the sides of the house, and the annual plants can be made to grow along the driveway or next to the shrubbery and house. A broad, open lawn, uninterrupted by flowers or shrubs, should be had.

The inside decorations of these old houses can be considerably changed by putting in plain decorations of that sort that does not catch and hold the dust. The windows can be made larger, doors can be cut where needed, and grates and stoves and furnaces substituted for fireplaces.

Aside from making suggestions as to the improvement of the old house, the institute worker can give many useful points to the person who intends to build a home on the farm. He can be advised as to the best place of locating his house, which is usually that of the old settler. As to the material, the cheapest and perhaps the best in the South is that of wood. His house should be built in a healthy locality, on the top of some hill and near some good public road. The source of the water supply should be considered before one builds. This is without doubt one of the most perplexing problems that we have in the rural South to-day. What shall be the source of our drinking water? Shall it be a bored well, a cistern, or a deep well? Cisterns have not proved a success in the South, and the deep well, where artesian water can not be had, is usually the source of drinking water. These deep wells are open to all kinds of contamination, and disease can often be traced to them. If the bored well can be had,

or if there is a spring in the vicinity, a cheap water system can be arranged for. The many small gasoline engines for sale on the market can furnish the power for pumping this water into tanks. It is the absolute duty of every educated citizen of the South to exert his every effort in trying to improve the sanitary condition in our rural districts and villages. Typhoid fever and many other diseases are quite prevalent throughout these districts, and this condition of affairs is largely due to the drinking water, and to the fact that there is no provision made for the disposal of the slops and waste from these country homes.

As to the style of the architecture of these houses, we will have to depend somewhat on those found in the cities, for unfortunately few architects have devoted any of their energies in developing plans for country homes and out-buildings, such as barns, silos, and cribs. Even the architecture of the old-style houses can be followed to some extent without fear of making a very grave mistake. I have traveled through most of the States of the South, and the one thing that impressed me most about our rural homes is the lack of paint. The farmers' institutes should make our farmers realize that paint not only adds to the attractiveness of the place, but that a house that is kept painted will last two or three times as long as one that is left unpainted. Even when houses are painted in our rural districts, very often the paint used is of an inferior quality mixed with some other oil rather than with linseed oil.

The beautifying of southern homes involves further the art of ornamental gardening, which is very backward in the South at the present time. But as prosperity increases it is only natural that a love for the beautiful should manifest itself in the direction of more commodious homes. There is no doubt that beauty should play in the future an infinitely greater part in the establishment of our homes and in the arrangement of their environment than it has in the past. Since the war our people have put all of their energies into the making of money. This is evinced by the great industrial development of the South in the past twenty years. The material prizes of fortune, so tempting and inviting, have diverted our pursuit from the higher to the lower objects of life. One of the greatest needs along the line of establishing ornamental environment for southern rural homes is popular education. It is important to know how to produce fine landscape effects as well as to be able to solve the problem of arrangement and construction of the home. How many people are unacquainted with the fact that more than one thousand varieties of ornamental trees and shrubs will grow vigorously and thrive successfully in all sections of our southland, besides a vast number of vigorous flowering plants possessing admirable qualities of beauty of their own. An inspection of our home grounds far and wide would reveal the fact that only a few of these are cultivated. Popular education will foster a love for trees, shrubs, vines, and flowers, and by their cultivation and study they will develop in the rising generation an admiration for the lovely in nature, the beautiful in art, and the virtues in character. Influences have been at work in this line of education in awakening the southern public to its important needs. For more than a decade of years associations for the improvement of towns and villages have been in successful operation. These, by planting trees, establishing beautiful lawns, and promoting a love for landscape gardening, have already accomplished some excellent results. If these societies do nothing more than to tend to rid our rural southern villages of the unsightly filth and waste that accumulates in the back streets, they will more than serve their purpose. Such societies will be encouraged by our farmers' institute meetings. This winter we will not only have lectures delivered on this subject at our farmers' institute meetings, but we will also have for distribution literature on this subject. Ornamental environments enhance the value of the home manifold. "I would not have that tree injured for five hundred dollars" is an expression that frequently is uttered by property owners. The valuation may be particularly high when compared with the cost of the tree. Perhaps the preparation of the soil and the work of planting the tree fifteen years ago may have cost one or two dollars and next to nothing in all the years that have followed. There are numerous instances to prove that from 2 to 5 per cent of the value of the place spent on ornamental improvements, there will be produced in the shortest time returns of from 20 to 60 per cent in increased value. The presence of ornamental trees, shrubs, and flowers makes a less expensive home often infinitely finer than a large and more costly one without them. A close observer has made this record: Passing through a street in one of the large cities of the South on which blocks of first-class houses had been erected on both sides, but evidently by different owners, there appeared to be a wonderful difference in success caused by shade trees

alone. There was a pretty row of Carolina poplars on one side, and on the other side no trees at all. This side had numerous notices of houses to rent, but on the side of the trees, in the shade, every house was occupied. The houses on both sides of the street appeared to be of equal age and value and there was no apparent difference between the two. There is not a particle of doubt that the presence of the trees had given the one side the greater advantage.

In the embellishment of our homes, however, there are far greater gains than can be computed in dollars and cents. It has been said that the hope of America is the homes of America. So we see that the safety of the State is built on the attachment to the home and that beauty of environment will never fail to soften and refine the nature, to ameliorate the severities of life, to add new strength to the chain that binds the heart of youth to the ancestral home, and develop the strongest virtues out of which heroes are made.

There is a wonderful significance in a beautiful, substantial home. A great man has said, "Show me a country whose hilltops are crowned with beautiful edifices towering above the ordinary dwellings of man, embodying human desire to do something worthy of the best aspirations of the heart, and I will show you a country where there are great patriots and great poets and great orators and great philosophers and great statesmen, warriors, and workers."

A. M. Soule, of Virginia, presented the following paper on the same subject:

The farm home bears the same relation to the agricultural interest of our country as the keystone does to the arch. It is the central, as it were, interlocking figure; the instrument which, properly played upon, affects all the conditions of farm life, favorably or unfavorably. It is the source from which intelligent effort, happiness, and success all emanate. Should it therefore not receive the greatest measure of attention from institute workers? What greater work can be accomplished for the cause of agriculture than the permanent betterment of the farm home, the embellishment of its grounds with attractive flowers and inviting shade trees; the beautification of its exterior, and the rearrangement of its interior so as to make the duties of the housewife and mother a pleasure instead of a drudgery?

Improving appearances an important matter.—The farm home is frequently characterized by untidiness, both as to its interior and exterior. Piles of trash are left here and there and create an unsightly condition of affairs. Flower beds are frequently an unknown quantity. Too often there are no trees to provide a windbreak from the winter blasts or serve as a cool retreat in the heated days of summer. Paint is often a stranger, and inconveniences are too numerous to mention. Broken-down fences, live stock grazing on the front lawn, or the entire absence of grass do not inspire one with a feeling that the home is that center of comfort and inspiration it should be on the farm as elsewhere. The humble little cottage of the mechanic in the city frequently presents a far greater attraction to the eye of the passerby than the home of the comparatively opulent farmer on his 500 or 1,000 acres of land, which he will tell you with commendable pride are unincumbered and as productive land as God ever blessed with His cheerful and life-giving sunshine.

Why should this condition exist? Why should not as much attention be given to the esthetic side of life in the country as in the city? Simply because this feature of rural life has been overlooked. It is just as essential and just as necessary to teach people to tidy up as it is to teach them that two and two are four. Cleaning up is a science, little as we have thought of it in that light, but it is a great and vital science, affecting the life of the individual as materially as many things which we regard as more essential.

How the school may help.—A great deal of the time and attention of the rural school is given to teaching the child things that are not as essential, and would not have such a marked influence on his future, as the science of cleanliness and learning to be tidy and systematic—learning to have a due appreciation of the esthetic side of life. In traveling through the country have you never been impressed with this fact? Have you never noticed that once in a while during a long day's drive through the rural district there stands out this strikingly attractive home, this ideal condition to which I am endeavoring to draw your attention? Have you ever rested in a home of the kind to which I refer? If so, you have been impressed not only with the chasteness of the exterior but with the loveliness of the interior as well. And you can understand and appreciate why this farmer and his wife and the little ones love the country and cling to it and feel that in their humble home they have all that is good and beautiful and worth striving for in life.

It can be said of us as a nation, and as farmers as well, that we have been industrious beyond measure, that we have garnered from the earth lavish stores, that we have guided great cities and tremendous industrial enterprises; but, as a nation, are we not sadly lacking in the esthetic things of life, the things that make the peasant homes of Europe so intensely attractive to their occupants, that give them such a love of country and of their native heath that they can scarcely be driven from it by the most bitter adversity? When these things come about, will not a part of the great problem now agitating America be solved—namely, that of keeping a just proportion of our people in the rural districts in order that the raw materials needed by our immense industrial concerns may be provided in sufficient quantity to keep the equilibrium between supply and demand properly adjusted?

The proper location of the house important.—The subject assigned me is so profound that it is difficult to know from what standpoint to approach it. Its magnitude makes the task discouraging; hence, it would only be possible to give a brief résumé of some things that might be accomplished for the permanent improvement of the farm home, so as to make it a delightful place in which to reside. One of the chief objections, at present, is its isolation. At a date when the country was sparsely settled, and roads as public highways were still unknown, homes were located without regard to social considerations or convenience to market, church, or school. Care should be given to selecting a site that will bring the farm in close contact with the public highway, so as to make the home accessible to neighboring farm homes. If several neighbors would build on the abutting corners of their respective properties, the community life could then be developed to a material degree not known at the present time. At the present time, with our knowledge of sanitary science, we believe that the farm home should be located on high ground where it will command a view of the plantation. It is just as easy to locate the farm home so that inviting vistas can be obtained from its porches as to put it down in some obscure place where it can not be seen and where it can only be approached with difficulty.

Providing a suitable water supply.—The time has passed in many communities when the springs should be exclusively depended on for water. If it is pure and wholesome there is certainly no objection to using spring water. In the warmer sections of the South ice would frequently be a question of serious consideration to the farmer; hence the value of a good spring. All too frequently, however, springs are contaminated now by the germs of typhoid fever and other death-dealing bacteria that find their way into the underground waters from sources unknown to the owner. Driven wells, drawing their water from deep down in the earth and incased in iron pipes, would insure a more healthful water supply and one that can be depended upon. The well can also be located conveniently to the house, even under it, and thus save enough of the energy of the housewife in twelve months to add years to her life. It is neither desirable nor just to expect the women of the household to carry water long distances from springs when a driven well can be put down at a cost of a couple of hundred dollars and solve the question by bringing it into the kitchen. Then, by the use of the windmills, force pumps, or a gasoline engine, the water may be driven into a tank placed on a platform of suitable height outside, or in the attic or basement, and a supply of water for the bathroom and the kitchen sink rendered available at all times. A spring may be used as the source of supply by installing a hydraulic ram at a cost of \$25 to \$100, depending on many local conditions which can not be enumerated here. A windmill with all accessories, including the bathroom fittings and necessary plumbing, that will furnish an ideal supply of water, can be installed at a cost of \$250 to \$350.

The improvement of the buildings an essential.—The character of the buildings found on the average farm is not what it should be. In some cases there is sufficient excuse for their condition, which is possibly due to the impoverishment of the farmer, or to the fact that they were built long ago, and that owing to the high price of material and the scarcity of labor the farmer has not had the heart to undertake their repair and rearrangement. In the far South very modest buildings will meet all the requirements of the average farm. On the cotton farm comparatively little is needed save a suitable shelter for the mules and the farming implements. A mere shed with suitable divisions for pens and with board or concrete floors will provide desirable shelter for swine, which, owing to the mildness of the climate, can gather their food in the fields practically all the year around.

On the tobacco farm the principal buildings required would be suitable barns for the cutting and storing. These can, as a rule, be constructed by the farmer himself with the aid of local carpenters.

On the dairy farm more elaborate buildings will be necessary. They should be constructed so that sunlight will reach every part of the building, and the windows should be larger and more numerous so as to insure ease of ventilation. In dairy barns, where cattle will be kept in more or less during cold weather, the floor should be of cement and the stanchions of iron. It is true that wooden mangers and floors can be used, but they are certainly unsatisfactory and in our experience we have found that cement floors are more economical than wooden ones, even when the best grade of oak is used.

The farm buildings should be constructed of planed lumber, at least on the outside, so that they can be painted. Many cheap forms of paint can be obtained that last very well. Some object to red, but it furnishes a cheap covering material which adds greatly to the attractiveness of the buildings and preserves the lumber as well. Cold-water paint, leaving the buildings a dead white, can now be obtained cheaply. We have had occasion to use it a number of times and have found it quite durable and reasonable in cost. With a spraying machine the stable can be painted inside and out, thus keeping it in a sanitary condition at a low cost.

On stock farms the buildings will need to be of a more elaborate character, though it is not necessary to have closed-in barns east of the Mississippi or south of the Ohio River. In fact, better results, judging from our experimental investigations with beef and dairy cattle and sheep and swine, will always follow the use of barns open at least toward the south, even as far north as Virginia and at the high elevations prevailing in the Appalachian region. In the more elevated sections of country and where the rainfall is persistent barns will need to be constructed so as to permit of storage. This is best obtained by using barns with saddle roofs, following the plank frame construction, as this economizes lumber very materially and gives a barn more convenient in every way than where the old methods of building are followed.

The demand for information relative to farm buildings has been so great at the Virginia Experiment Station that we have endeavored to meet the situation by having blue prints of the various buildings in use on our college and station grounds made for distribution to residents of the State at the actual cost of making the prints. This has enabled many farmers to get working plans of the silo and many other farm buildings and have them constructed through the aid of local carpenters. Modern, convenient, and properly arranged buildings are a part of the working capital of every farmer and the farmer can afford to sink some money in making this part of his equipment what it should be. The endeavor to farm without suitable buildings has, so far as the writer's observation goes, been a dismal failure and is one reason why so many farmers have the yoke which a mortgage fixes so firmly around the neck to carry for an indefinite number of years.

The house should be convenient and comfortable.—But more important even than the farm buildings and more essential to the well-being of the family is the necessity of a comfortable farmhouse. And this question of houses affects the labor problem as vitally as any other. We have constructed at the Virginia Experiment Station small weatherboarded cottages, with plenty of light and good ventilation, with cement foundations and four good rooms, at a cost of \$250 to \$300. We have found up to the present time that men can be kept in these houses at a lower wage scale than that prevailing in the vicinity of the college farm, simply because these little cottages are warm, dry, and comfortable, and superior to those found on the average farm. The provision of plain and substantial houses for the workingmen will do much to solve the labor problem which is now agitating the farmers from one end of the country to the other.

As to the style of the farmhouse, that can not be discussed in detail within the limits of a paper of this kind. From the small cottage to the two-story house bordering on the mansion of colonial days convenience of arrangement and good ventilation should be the first essentials to consider. The porch, especially in the South, is the most important room in the house. In cold climates it can be inclosed in glass during the winter months and made into a sun parlor, furnishing attractions which can not adequately be appreciated by one who has never been snow-bound in a northern home during the winter for weeks at a time. The farmhouse may cost anywhere from \$500 to \$5,000, according to its extent and elaborateness of finish.

A substantial cellar should be built under every house, concrete being the material to use, as it is the cheapest and most durable. The house may be built of wood, brick, stone, or concrete blocks. Cement or wood-fiber plaster should be used for the walls, and pine or oak, if properly selected, will make a very satisfactory finishing material. Every farmhouse, except in the Gulf States, should have a furnace, so that it can be uniformly heated. A hot-air furnace can be installed at a cost of \$250 to \$300, depending on the make and size. A steam-heating plant under the same conditions will cost from \$350 to \$400, according to our experience at the college. For the sake of attractiveness and cheer a large fireplace may be constructed in the living room, where either wood or coal may be used. An ash pit should be built under the fireplace, so as to keep the dirt out of the upper part of the house. Water should be carried through the house, as already indicated, and light may be provided through the use of acetylene gas, which furnishes a most desirable light, and there is no danger from the use of this gas if a properly constructed machine is bought and the farmer will operate it himself and not leave it to the care of ignorant and indifferent servants.

Then, with the telephone connections, and the advent of good roads and circulating libraries, what pleasures and comforts are denied the farmer's home? None that we can see; but unfortunately the essential things just enumerated are woefully lacking on the average farm. It is true that poverty may explain the cause sometimes, but there are thousands upon thousands of farms where the owners are amply able to provide all these conveniences and luxuries for the home, and yet they are lacking simply because the farmer has not been educated along these lines; simply because this question of home improvement has not been agitated as it should have been; simply because the farmer does not realize what these comforts and privileges mean to his family, what enjoyment it would bring to the housewife, what attractiveness it would lend to the home, and how firmly it would bind the boys to the pursuit of farming and to the love of rural life. What a delight the farm kitchen would be with a modern range, a hot-water heater, and porcelain or soapstone wash sinks and drainage provided for carrying away the waste water. And why, pray you, should not the comparatively opulent farmer provide these conveniences, nay these necessities, for his wife? Are they not as necessary as fine buildings for the live stock?

Disposing of household waste.—As to the disposition of waste from the wash sinks and lavatories opinions differ. The septic tank system for the disposal of sewage has many warm advocates, and there are certainly many conditions under which it can be successfully installed. If a cesspool is properly constructed and contains 4 feet of liquid, a tenacious skum 4 to 6 inches in depth will form on top, which is just what takes place in the septic tank. There is no good reason, therefore, why a cesspool should not be provided on every farm and prove the solution of what has been an apparently unsolvable problem in the past. While the dry-earth closet has its advocates, as ordinarily cared for, it is likely to prove a breeding ground for disease, and is just as likely to be objectionable and pernicious as a cesspool. Much of the trouble experienced with cesspools is due to their improper construction rather than to the system itself. These pools should, of course, be built at some distance from the well and on sloping ground that will carry the drainage from the house; otherwise there is no particular danger. Disinfectants should not, as a rule, be used in the cesspool, as it is now conceded that many forms of harmful bacteria are destroyed by other forms which develop in the cesspool. Trouble has frequently come from cesspools because they were not kept covered, so as to prevent mosquitoes breeding therein. I am credibly informed by those who have had considerable experience that a cesspool need not cost much money, and that one 6 to 7 feet wide and 7 feet in depth will take care of the waste material from a good-sized farmhouse. Any handy farmer can construct one for himself at a cost of from \$15 to \$40.

Beautifying the farm home.—The lawn immediately in front of the house should not be crowded with trees and shrubs, but left in a green sward. Attractive drives and walks should be laid out where necessary, the weeds should be kept in check, and the grass mowed from time to time, if not by hand, at least by horsepower. With painted fences and care of the walkways and with the addition of flowers and the grateful shade which stately maple, oak, beech, and hickory trees will provide, an attractiveness is added to the setting of the farm which can not be properly pictured in words. An extended list of the flowers that might be used satisfactorily would occupy too much space, but sweet peas, nasturtiums, scarlet sage, hollyhocks, chrysanthemums, dahlias, asters, phlox, verbenas, etc., can all be grown with so little effort that they should form a part

of the collection on every farm. Then, roses grow so abundantly and in such variety that they should be trained up on the porches, especially the ramblers, of which there are several distinct varieties. The following shrubs are all hardy and easy to take care of: Japonica, snowball, lilac, hydrangea, wigelia, syringa, honeysuckle, etc.,

In conclusion, the responsibility of the farmers' institute for the present condition of farm homes is very great, in my judgment. I have endeavored to portray the far-reaching influence of the farm home on the welfare of the farmer and the community, and also its relation to the preservation in the minds of the boys and girls of a love of the country. We are suffering to-day from a neglect of rural industries, from the crowding of people into towns and cities, because they can not enjoy the conveniences, the society, the gayety, and frivolity which too often characterize city life. The hum and buzz of a big city do not give happiness to any. There is something better and nobler in the human mind which requires satisfaction, and which will most often be found where persons have come intimately in contact with nature and learned to appreciate the God-given beauties of the landscape, and of the trees and flowers and the growing crops of the field, and the variety of life found on the average farm. But there can be no real permanent pleasure and satisfaction in country life so long as the farm home is a neglected institution, its buildings unpainted and unsightly, the yard overgrown with weeds and trash, and the house itself a ramshackle affair lacking in all modern conveniences. As already indicated, there is sufficient wealth at the disposal of thousands of farmers to remedy these unsightly conditions. Desirable, yea necessary, changes will not be brought about suddenly, but gradually and surely by the education of the people in the science of being tidy and systematic, and of appreciating the esthetic side of life and the joy and happiness which certainly flow from it. These conditions so essential to the permanent welfare of our farm homes we must strive for earnestly and with unity of purpose. The farmers' institute, through its ability to reach thousands of people annually and make permanent impressions on their receptive minds, must lead the vanguard in this fight for the rejuvenation of the farm home.

The convention then adjourned until 9 o'clock a. m., Wednesday, November 14, 1906.

MORNING SESSION, WEDNESDAY, NOVEMBER 14, 1906.

The convention was called to order at 9.30 a. m., by President Creelman.

REPORT OF TREASURER.

Account of John Hamilton, treasurer of the American Association of Farmers' Institute Workers, from January 1, 1906, to October 31, 1906.

DR.

To amount received from late treasurer, G. C. Creelman.....	\$119. 10
To amount received as dues from sundry persons.....	121. 00
	240. 10

CR.

By amount paid for postage and stationery.....	40. 75
By amount paid for printing circulars.....	16. 00
By amount paid for printing programmes.....	17. 50
By balance.....	165. 85
	240. 10

Balance in hands of treasurer, October 31, 1906, \$165.85.

The undersigned, a committee appointed to audit the accounts of John Hamilton, treasurer of the American Association of Farmers' Institute Workers, report that they have examined his accounts and have compared his vouchers with the credits claimed and find the same correct, and the balance in his hands October 31, 1906, to be one hundred and sixty-five dollars and eighty-five cents.

(Signed) W. C. LATTA,
W. G. VINCENHELLER,
Committee.

On motion, the report of the committee was accepted.

REPORT OF COMMITTEE ON RESOLUTIONS.

The committee on resolutions, consisting of F. H. Hall, E. A. Burnett, and C. A. Cary, reported as follows:

Whereas the amount of instruction given by the farmers' institute at its very best is of slight significance when compared with what a twentieth-century farmer should know; and

Whereas the number of people who attend the institutes is surprisingly small, compared with those who need more agricultural knowledge and inspiration; and

Whereas these conditions must continue to exist as long as but one or two institutes a year are held in counties containing several hundred square miles: Therefore be it

Resolved, That it is the sense of this association that an important function of the farmers' institute is one of cooperation with other educational agencies;

That the institutes should, whenever possible, be so managed as to bring together a goodly number of those engaged in agricultural practice;

That there should always be some instruction that is definitely related to the work of the experiment station and the United States Department of Agriculture;

That this instruction should be so presented as to awaken interest in what is being done in agricultural investigation and to turn the attention of the people to the sources of information;

That the young people and their teachers should be invited to attend the institutes, and the programmes should be so arranged that their interest in agricultural education may be awakened and the cooperation of the schools secured. In a word, it is the sense of this body that the aim of the institutes should be—

(1) To teach a few things.

(2) To do this so well that the desire to know many things will be created.

(3) To point the way to the sources of information—for adults, the station and the Department of Agriculture; for young people, the schools and the agricultural colleges.

(4) To make sentiment in favor of a liberal support of all these educational agencies.

Resolved, That this association, appreciating the importance of providing more systematic and extended instruction in agriculture in the farmers' institutes, hereby expresses its approval of the use of the movable school of agriculture as an instrument for this purpose.

Second. That it commends the form of organization outlined and courses of study prepared by the National Department of Agriculture for the establishment of such schools, and hereby earnestly requests the committees of agriculture in Congress to recommend, and the Congress to pass, an appropriation sufficient to enable the Department to perfect plans and courses of study, and to organize, equip, and place in operation, in charge of competent experts, a number of these schools as demonstrations of their value and practicability.

Whereas we recognize the educational possibilities of agricultural fairs; and

Whereas it has been demonstrated that strictly educational features add much to the interest and value of such fairs: Therefore

Resolved, That we heartily commend the efforts of agricultural colleges, experiment stations, and farmers' institute managements to make the fairs more useful to the people, and we respectfully suggest the desirability, wherever feasible, of continued and extended work in this direction by the institutions named.

Resolutions expressing appreciation of courtesies shown the delegates were also adopted.

REPORT OF EXECUTIVE COMMITTEE.

This report was presented by G. C. Creelman, of Ontario, as follows:

Pursuant to the call of the chairman, the executive committee met April 13, 1906, at the Grand Union Hotel in New York City. There were present President G. C. Creelman, W. L. Amoss, and John Hamilton, secretary.

The attention of the committee was called to a form of circular letter addressed to the farmers' institute workers of the United States and Canada, requesting them to become members of the association. On motion, the secretary-treasurer was authorized and directed to have 3,000 copies printed and sent out to the institute workers.

The secretary reported that he had sent out notices to State and provincial directors of institutes reminding them of their omission to pay the annual dues of \$5 for the year 1905. The list of appointments on standing committees informally acted upon by the individual members of the executive committee was, on motion, formally ratified.

The secretary-treasurer was authorized and directed to procure for the use of his office a record minute book, a book of accounts, and a receipt book.

The fixing of time and place of the next annual meeting of the association having been placed in the hands of the executive committee, it was, on motion, directed that the next annual meeting of the association be held in California at the same place as the meeting of the Association of American Agricultural Colleges and Experiment Stations, and the time to be August 6, at 10 a. m.

The details as to transportation rates, routes and arrangement of trains, time-tables, etc., was on motion referred to the secretary-treasurer, with power to act. Arrangements with regard to securing meeting hall, hotel accommodations, etc., were also placed in the hands of the secretary-treasurer.

A tentative programme for the next meeting was presented and discussed, and the secretary was directed to have a revised copy prepared and submitted to the members of the committee for approval.

The committee had hardly returned to their homes when one of the greatest catastrophes in the world's history occurred in San Francisco. This event rendered it impracticable to think of holding our meeting at that place. We then selected Baton Rouge, as the people of that city were clearly entitled to the next meeting, and it was only because the colleges and stations had decided to go to California that we were deferring our Baton Rouge trip. Your president and secretary, therefore, corresponded with the other members of our executive committee and with the executive committee of the association of colleges and stations, with the result that the present meeting was planned and is now being carried out.

J. G. LEE,
F. H. HALL,
W. L. AMOSS,
G. C. CREELMAN,
JOHN HAMILTON,
Committee.

REPORT OF COMMITTEE ON NOMINATION OF OFFICERS.

The committee on nominations, consisting of Tait Butler, H. T. French, and E. E. Kaufman, presented the following nominations, which were confirmed:

President, E. A. Burnett, of Lincoln, Nebr.

Vice-President, C. A. Cary.

Secretary-treasurer, John Hamilton, of Washington, D. C.

Members of the executive committee, F. H. Hall, Franklin Dye, G. A. Putnam.

STANDING COMMITTEES.

The discussion of the reports of the standing committees was then taken up and participated in by Messrs. Putnam, Amoss, Taft, Latta, Hamilton, Critchfield, Cary, Huston, and Creelman.

On motion, it was ordered that the standing committee on legislation be abolished.

RELATION OF FARMERS' INSTITUTES TO OTHER EXTENSION WORK.

K. L. BUTTERFIELD, of Massachusetts. Will you permit me to make one or two suggestions growing out of my interest, not only in farmers' institute work specifically, but also in other forms of college extension teaching? It seems to me that the time has arrived when we should have a pretty carefully worked out definition of farmers' institute work. What is the farmers' insti-

tute? How does it differ from other methods of reaching farmers? What is its function?

This suggestion may have some practical bearing when I tell you that the standing committee on extension work of our Association of Agricultural Colleges and Experiment Stations is prepared to consider during the coming few months the specific question of the relation of the farmers' institute to other forms of extension teaching. It occurs to me that it would be a most desirable thing if your standing committee on cooperation with other educational agencies should work with us on the same question. I am sure much would be gained by our working together. The interests of all would be better conserved, and when the reports were made at the next meetings of the respective associations there would be more likely to be harmony of view than could otherwise be the case.

I do not know whether the time has arrived for any such step as I am about to mention, and it is quite possible that my last suggestion is entirely premature; but the development of extension teaching is coming on at such a rapid rate that the time is not far distant when we shall need, in the association of colleges and experiment stations, to consider in a definite way other phases of extension teaching than farmers' institutes. Would it be feasible and desirable for your association to broaden its work and to become a representative not only of the farmers' institute movement of the country but also of extension teaching generally? At any rate, I throw out this suggestion without even committing myself to the wisdom of it, namely, that you amend the name of your association so that it will be "The American Association of Farmers' Institute and Extension Workers."

The recommendations of President Butterfield were referred to the executive committee for consideration.

INCREASED APPROPRIATION FOR FARMERS' INSTITUTE WORK OF THE U. S. DEPARTMENT OF AGRICULTURE.

On motion, the following resolution was adopted:

"Whereas we recognize the urgent need of an increased appropriation for the work of the division of farmers' institutes of the National Department of Agriculture: Therefore, be it

"Resolved, That the American Association of Farmers' Institute Workers, at its eleventh annual session at Baton Rouge, La., respectfully urges the several State institute managements to seek, through the various means at their command, such increase in the appropriation for the purpose named."

On motion, the chair was directed to appoint a committee of three on national legislation. The chair appointed on this committee Mr. N. B. Critchfield, of Pennsylvania, Mr. L. R. Taft, of Michigan, and Mr. Fred. H. Rankin, of Illinois.

After adopting resolutions of respect to the memory of W. W. Miller, of Ohio, former vice-president of the association, the convention adjourned sine die.

**STATISTICS OF FARMERS' INSTITUTES IN THE SEVERAL STATES,
TERRITORIES, AND PROVINCES.^a**

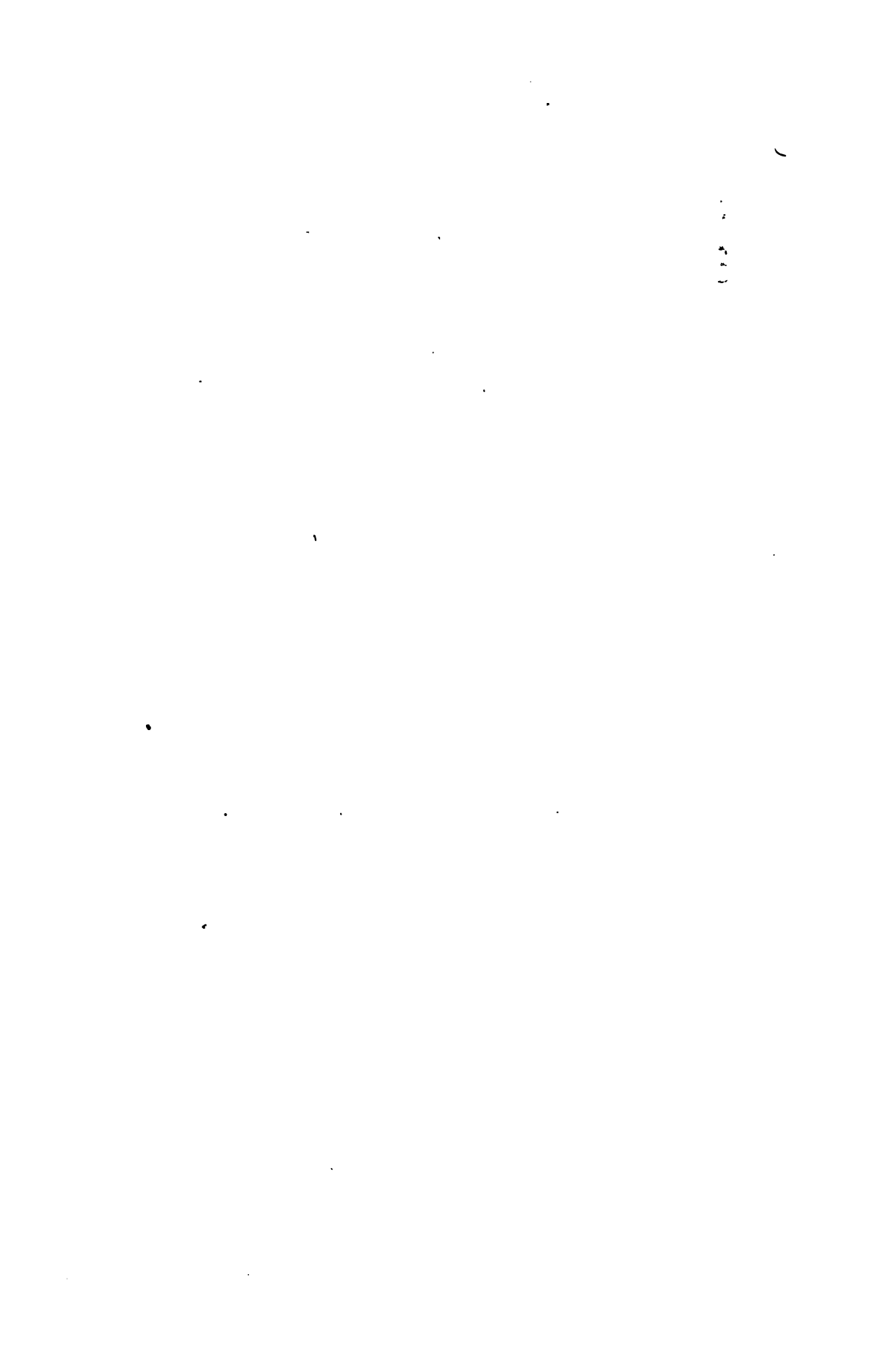
State, Territory, or Province.	Sessions of regu- lar insti- tutes.	Sessions of spe- cial insti- tutes.	Attend- ance at reg- ular insti- tutes.	Attend- ance at special institutes.	Number of speak- ers em- ployed.	Amount of money expended.
Alabama.....	85	.....	8,590	.....	17	\$600.00
Arkansas.....	42	.....	7,150	.....	5	400.00
California.....	272	.....	22,861	.....	219	9,000.00
Colorado.....	123	5	16,675	3,000	37	3,800.00
Connecticut.....	83	11	4,890	5,800	60	1,850.00
Delaware.....	40	.....	7,200	.....	7	600.00
Georgia.....	56	.....	5,000	.....	20	2,500.00
Hawaii.....	4	.....	300	.....	12	8.95
Illinois.....	555	30	79,428	1,560	158	20,196.56
Indiana.....	918	.....	129,894	.....	40	10,000.00
Louisiana.....	24	16	400	4,337	10	527.32
Maine.....	102	10	6,967	1,250	17	3,000.00
Manitoba.....	58	33	589	1,000	26	879.88
Maryland.....	125	15	7,756	12,540	34	4,000.00
Massachusetts.....	153	31	19,172	8,025	46	1,659.49
Michigan.....	934	61	122,573	6,000	70	7,800.00
Minnesota.....	238	12	51,211	900	10	20,200.00
Mississippi.....	220	6	10,000	200	5	3,000.00
Montana.....	67	10	7,500	380	14	3,912.39
Nebraska.....	515	7	72,894	37,000	41	6,000.00
New Hampshire.....	48	1	4,000	1,000	15	1,500.00
New Jersey.....	126	50	10,791	1,200	13	3,375.00
New York.....	1,062	23	134,989	19,800	65	20,000.00
North Carolina.....	226	39	30,284	3,237	22	3,600.00
North Dakota.....	162	150	20,310	24,126	9	5,577.16
Ohio.....	1,225	200	81,816	13,697	27	19,478.25
Oklahoma.....	149	.....	7,460	.....	8	660.00
Ontario.....	4,352	37	170,803	6,800	92	40,469.42
Oregon.....	109	2	16,350	.....	4	1,174.73
Pennsylvania.....	970	17	165,553	60,554	52	17,500.00
Quebec.....	491	.....	45,000	.....	11	5,272.30
Rhode Island.....	4	1	1,000	250	5	125.00
Saskatchewan.....	140	72	5,331	12,446	20	3,500.00
Utah.....	74	.....	6,680	.....	23	1,501.55
Virginia.....	35	1	4,000	1,200	8	928.89
Washington.....	.....	32	.....	2,850	7	230.00
West Virginia.....	224	.....	4,480	.....	13	3,966.12
Wisconsin.....	251	6	32,200	600	25	6,000.00
Wyoming.....	64	.....	3,401	.....	.....	1,107.59
Total.....	14,326	881	1,325,503	219,752	1,267	235,900.60

^a Regular institutes do not include independent institutes, picnics, harvest-home meetings, round-up meetings, special trains, etc. Special institutes embrace independent institutes, picnics, harvest-home meetings, special trains, etc. The attendance is total number present at all of the sessions.

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